

**EVALUATION OF FACTORS INFLUENCING IMPLEMENTATION OF THE  
SECONDARY SCHOOL GEOGRAPHY CURRICULUM IN LUGARI  
DISTRICT, KENYA**

**BY**

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YEAR 2015**

## DECLARATION AND APPROVAL

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This research thesis is my original work and has not been presented for any academic award or degree in any other university. No part of this work may be presented, reproduced or published without the prior written permission of the author and or Moi University.

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## **DEDICATION**

This research thesis is dedicated to the family of Amunze Ayuka , Zakayo Burudi and my husband Mr Mmula S. Burudi, children Cynthia, Eyleen and Jocylene for their support during my study and preparation for the research.

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## ABSTRACT

The purpose of this study was to evaluate factors influencing implementation of Form Three Geography curriculum in Lugari district, Kenya. The objectives of the study were to: evaluate the levels of implementation of Geography among learners in Form three; to find out the attitude of teachers and students towards the Geography curriculum, determine the involvement of educational managers in Geography innovations in Form Three; establish availability and use of Geography resources in secondary schools, assess levels of teacher competence in implementation of Geography curriculum in the district. The study was based on modified Tyler's goal attainment and Stufflebeam's models that involves the statement of defined objectives against which school life and student implementation are evaluated. Survey design was used for the study. Stratified sampling was used to select secondary schools in the district; simple random sampling was used in selection of Form Three Geography students. Principals, Heads of humanities department, Form Three teachers of Geography of the selected schools and the DQASO participated in the study. A total of 411 respondent participated in the study. The main instruments for data collection were: questionnaires, observation checklists and document analysis. Data collected was analyzed by descriptive statistics and presented in frequency tables, % and with the aid of SPSS software. The results of this study revealed that the Form Three Geography Curriculum was not implemented as anticipated by the KIE due to: inadequacy in teaching and learning resources and facilities, lack of in-service courses for the teachers and inadequate support from the school management. The study findings shall lead to formulation of government policies towards better implementation of the Geography curriculum. In the light of these findings, the researcher recommended that the M.O.E and NGO should provide resources and facilities for effective implementation of the curriculum, organize in-service courses for the teachers, train DQASO for effective supervision of the curriculum and teachers to be encouraged to use practicals in teaching of the subject.

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#### **ABBREVIATIONS**

BOG: Board of Governors

CIPP: Context, Input, Process and Product

DEO: District Education Office

DQAS: Directorate of Quality Assurance and Standards

DQASO: Directorate of Quality Assurance and Standards Officer

DPMF: Development Policy Management Forum

HODs: Heads of Department

KCSE: Kenya Certificate of Secondary Education

KESI: Kenya Education Staff Institute

KESSEP: Kenya Education Sector Support Program

KICD: Kenya Institute of Curriculum Development

KIPPRA: Kenya Institute for Public Research and Analysis

KNEC: Kenya National Examination Council

LDDP: Lugari District Development Plan

ROK: Republic of Kenya

SACMEQ: Southern Africa Consortium for Monitoring Education Quality

SEIA: Secondary Education in Africa

SPSS: Statistical Package for Social Sciences

TSC: Teachers Service Commission

## **CHAPTER ONE**

### **1.0 INTRODUCTION TO THE STUDY**

The purpose of this study was to evaluate the factors influencing implementation of the Geography curriculum in secondary schools in Lugari District, Kenya. This chapter presents the background of the problem, the statement of the problem, the purpose of the study, research objectives and questions that guided the study. The significance, scope, limitations and justification of the study are highlighted. The chapter provides the conceptual framework on which the study was based.

### **1.1 Background to the problem**

Evaluation has become an important concept in the new context of school improvement for the 1980s and beyond yet many schools continue to view evaluation as a luxury to be afforded on rare occasions, being a one-time event Ramsay and Clark (1990). This has produced little school improvement and only resulted in a printed report sitting on a shelf, neatly bound and gathering dust.

Globally, social economical and political developments are taking place at rates which are so varied that they are creating problems for educational planners as they struggle to provide good quality education that can prepare the youth to face challenges in their adulthood. Education must prepare and equip the youth of the country with knowledge; skills and experiences necessary to enable them play an effective role in the nation and ensure that opportunities are provided for the development of the individual talent and personality (UNESCO, 2000). According to Indoshi et al. (2010), education in Africa has evolved from traditional systems through western oriented adaptations to modern multi-faceted adaptations. A distinguishing feature is that traditional African models were integrated with little demarcation between the liberal and vocational fields as evidenced in the heavily academically

oriented Western models Kerre et al. (1995). However, Mbiti (1974) expects education to guide and fashion a person into a fully functioning individual who is aware of his role in the society and has respect for the environment.

Educational systems in Africa have come under strong criticism in the 1970s and 1980s for being too theoretical and academic, ignoring the practical aspects that would prepare youth for productive careers UNESCO (2000). In response, most governments have had to revise and at times overhaul their educational systems as an integral part of general school curriculum Indoshi et al. (2010). Similarly, evidence based strategies involving evaluations are at the root of any successful reform. In the Sub-Saharan Africa, where rigorous evaluation using quantitative and qualitative information has been lacking, policy has been based on anecdotes, opinion and prejudice Adriaan, (2007). These are substitutes for authentic information that provides the basis for learning-based planning and policy making, posing challenges in the evaluation of educational curricula.

In Sub-Saharan Africa, despite the considerable progress made in improving education data collection systems, information gathering on secondary education still remains neglected Adriaan (2007). This has made evaluation of the necessary reforms of secondary school subjects to take place without good information. In fact public examinations have wrongly been used as an evaluation tool as they lack the requisite evidence of learners' achievement of the prescribed competencies at various levels of progress through school Wasanga and Kyalo (2007).

National statistics should provide information on the availability of inputs. Adriaan (2007) further remarks that: (a) household surveys provide information on educational attainment, school attendance and education expenditures; (b) examinations results can

provide feedback to schools on student performance;(c) assessments can provide policy makers with information on the overall performance of the system and compare it with neighboring countries; (d) continuous classroom assessments can help teachers identify the need for remedial instruction and (e) randomized sample surveys are often very useful to gather evidence on the performance of particular curriculum interventions. But significant challenges remain. The capacity to collect data has increased dramatically; but the capacity to analyze these data often lags. Moreover, even when information is available, it is often not used in the policy process, especially when the findings are inconvenient or contradict conventional wisdom of having been evaluated as should be the case with Form Three Geography curriculum.

In Great Britain, debate has been fuelling on the declining standards of achievement in geographical education with attention being drawn to the deficiencies of teaching approaches in Geography, Christine (1996). “The political class even knows that history and geography in particular have been fading in importance and sometimes in the strength with which they have been taught in recent years”, the Hansard (1996 P. 20). This kind of scenario may not be exclusive of the United Kingdom schools but also to those in Kenya where geography has increasingly become less attractive to both the teachers and the students Wafula (1990). Poor performance in Geography has been attributed to inappropriate teaching methods in addition to other factors like the quality of teachers, motivation of teachers and students KNEC (2000). In Nairobi Province, the poor performance in KCSE Geography is attributed to teacher related factors, lack of resources and facilities and motivation, Achola (2003). To motivate the teacher and the learner, the Ministry of Education in conjunction with the KIE has initiated several reforms in the subject. In the year 2006, the number of geography lessons was

increased from four to five per week for effective coverage of the syllabus, and in the 2008 KNEC increased the time for Geography examinations from 2 hours and 30 minutes to 2 hours and 45 minutes to enable the learner to have ample time to handle the required questions. All these were done to improve on performance in the subject KNEC (2008).

Though viewed as a science in Kenya's secondary school curriculum, Geography is categorized as an elective in section 'b' as a humanity that requires selection of at least one subject Otunga (2010). As such, there is least emphasis on the teaching and learning of practical areas such as map work and fieldwork. This has consequently compromised the overall implementation and performance of the subject. This has further been observed by Christine (2008), that: "most of the primary and secondary schools do not recognize the value of fieldwork with Geography further expressed as the worst taught while students see it as "boring", opting to drop due to it no longer being a compulsory subject".

Evaluation of a curriculum is the last (tenth) stage in the curriculum development process at the Kenya Institute of Curriculum Development (KICD) which is a curriculum development and research centre for all levels of education except University, Otunga (2010). Accordingly, Otunga (ibid) views evaluation as the process of assessing the extent to which the curriculum objectives have been or are being achieved. This is in response to Tyler's (1949) fourth question on how the effectiveness of learning experiences can be evaluated.

In Kenya, Poor performance in Geography was realized through KNEC enrolment and learners performance which was on a declining trend. Student enrolment dropped from 106,865 in the year 2005 to 97,991 students in 2006, though the number improved to



103,288 in 2007 KNEC (2008). This is supported by Christine (2008) that Geography as a subject was on the decline and needs to be made more relevant with great focus on global issues such as climate change, sustainable development and trade to increase the learner's interest. Through school inspection, she expressed that "Geography as a subject was at a crucial period of development and more was to be done to make the subject relevant and engaging to the students."

Poor performance was further observed in the year 2008, as the then Minister for Education Professor Ongeru commended on the falling standards of Geography in the whole country citing shortage of teachers, inadequate resources and facilities and ineffective School management as having a great impact on curriculum implementation in most of the schools, Teachers' Image Magazine (2008 P.18). This was further observed by the D.E.O Lugari district during the 2010 education day that the performance in Geography was on a declining trend and hence immediate action was required as the subject was of great value to the socio-economic development of the country.

Despite efforts by the Ministry of Education to reform the Geography curriculum, KICD and KNEC, Geography as a subject has not excelled in implementation as anticipated. This is reflected in the KCSE Geography analysis at the district level for the years 2006, 2007, 2008, 2009 and 2010. From a total of 1938 students in the five years from 2006 to 2010, only 413 students (13.85 %) had a mean score (MS) of 'C+' and above while 1525(86.15 %) had a MS of 'C' and below. For a MS of 'C+' and above there was a 14.20 % in 2006, 14.72 % in 2007, 10.83 % in 2008 , 15.61 % in 2009 and 14.54% in 2010 as indicated in Table 1.1 . This indicates a persistent negative performance in the subject hence calls for immediate action to rectify the situation, as

Geography is one of the relevant subjects required for development in the present society (DEO, 2010).

**Table 1.1 Mean Performances in Geography in Secondary Schools in Lugari District**

YEAR	MEAN SCORE %
2006	14.20
2007	14.72
2008	10.83
2009	15.61
2010	14.54

Evaluation is a mechanism by which schools can measure the extent to which their educational objectives have become a reality. Evaluation therefore serves a multitude of purpose: accountability, management, school improvement and more informed decision-making Ramsay and Clark (1990). It is based on this understanding that the study sought to evaluate the factors influencing the implementation of the Form three Geography curriculum in Lugari District, as better implementation may be cultivated from effective formative evaluation of the set curriculum.

### **1.2 Statement of the Problem**

The evaluation of the factors influencing implementation of Geography curriculum in secondary schools is still a challenge worldwide as is the case in Lugari district. No much research has been carried out to evaluate the levels of curriculum implementation factors on implementation of the Geography innovation. Researchers such as wafula (1990) Achola (2003) and Locho (2008) researched on factors affecting curriculum implementation in Bungoma, Nairobi, Kakamega respectively. The present researcher deemed it necessary to evaluate factors influencing implementation of the Geography curriculum as learner poor performance could be attributed to curriculum implementation factors such as the attitude of teachers and the learners towards the innovation, management support, teaching and learning resources and facilities and teacher competence. This was the departure for the current study as it set out specifically to answer the question: what levels are curriculum implementation factors in implementation of the secondary school Geography curriculum in Lugari District?

### **1.3 Purpose of the Study**

The main purpose of the study was to evaluate factors influencing implementation of Form Three Geography curriculum in Lugari district, Kenya. This entailed an

assessment; establishment and determination of the levels of implementation of Geography among learners in selected secondary schools.

#### **1.4 Research Objectives**

1. To find out the attitudes held by teachers and students towards the Geography Curriculum.
2. To determine the role of education managers in supporting the implementation of Geography curriculum in secondary schools in Lugari district.
3. To establish the extent of availability and use of resources and facilities in implementation of the Geography curriculum.
4. To assess the levels of teacher competence in implementation of the Geography curriculum in the district.

#### **1.5 Main Research Question**

What levels are curriculum implementation factors in implementation of Geography curriculum in secondary schools in Lugari district?

#### **1.6 Justification of the Study**

From the background of the study, it has been indicated that the government has made efforts to change the Geography curriculum to suit the needs of learners and the entire society. Though valued as an “integrative subject”, the enrolment and the levels of

performance in Geography have been dismal in the district and the whole nation. The 2004–2010 KCSE results indicate a drop in the performance of Geography KNEC (2008). From the 2010 KCSE Geography results analysis for Lugari district, the DEO remarked that, “The results have proved once again that performance in Geography is below average for most of the schools, therefore urgent measures must be put in place to avert this trend.” The DEO further emphasized on the need to improve on the students performance in Geography as valuable topics such as climatology, fishing, population, trade, transport and communication, soils, industrialization, pollution and environmental conservation are vital as they enable man understand his environment which influence his daily activities. This study came in timely as it would provide data that could be utilized in improving the implementation of the Geography curriculum and performance of students in the subject.

The study was necessary as it could establish factors influencing the dismal performance in Geography at the district and national levels, yet the subject is of great value in national development and in human sustenance. Lastly the researcher found the study necessary as such a study has never been done in the district hence data collected would reinforce the efforts made by the Ministry of Education in implementation of the Geography syllabus in the country.

### **1.7 Significance of the Study**

The findings and recommendations of the study will be significant as it will bring the factors that influence implementation of Form Three Geography curriculum into limelight and thus provide information that reflect what is happening to the implementation of Geography subject in secondary schools in the country. The study will expose the teacher and learner’s attitude towards Geography curriculum which will provide a basis for improvement in teaching and learning of the subject in the

district and at the national level. The study will assist in designing instructional materials and improve on evaluation methods applied in the classrooms by teachers hence modify where deficiency is noted. It will assist stakeholders and school managers to re-examine their roles in implementation of the curriculum hence promote enrolment and performance in the subject. The outcome will help opinion leaders, education officers, school administrators, parents and teachers to think of better policies which can enhance implementation of the Geography syllabus in the district and the whole country. The Ministry of Education will allocate enough time for teaching the subject. In a nutshell, the feedback obtained during evaluation will be used to improve, revise or overhaul Ndire (2007) the Geography curriculum in order to enhance its performance.

### **1.8.0 The Scope and Limitation of the study**

#### **1.8.1 The Scope of the Study**

Ideally, this study should have been conducted on all secondary schools in the country. However, the scope of the research study was specifically intended to be carried in the stated study area, excluding the private secondary schools. This is due to dramatic change in the last few years resulting in lack of accurate data on private school enrolment (KIPPRA, 2001). The study was carried out in selected secondary schools in Lugari District. Participants included Form Three Geography students, Form Three teachers of geography, Heads of Humanities Department, Principals and the Quality Assurance and Standards Officer in the District. The study evaluated attitude of teachers and learners towards Geography subject, management support in implementation of Geography subject, adequacy and use of teaching resources and facilities and teachers' competence in implementation of the innovation. Lugari district

was considered for study as such a study has never been done in the District and due to poor performance in Geography as a subject.

### **1.8.2 The Limitations of the Study**

One of the limitations of the study was time factor whereby only a few schools, students, teachers and principals were sampled for the study upon which generalizations and conclusions were made for the whole district. This may not reflect a true picture about the levels of evaluation of the Geography curriculum in the district as schools have different environments, culture and resource endowment. Furthermore, it is worthy to note that the study had some limitations associated with the sample of students in the analysis, the data collection methods and the overall study design approach. The sample for the study was drawn from a set of students primarily in the public secondary schools in Lugari district. The finding may not generalize to students with different characteristics, such as those who attend private and more advantaged staffed schools (model secondary schools). The data used in the analyses were based on students' emotional – reports (with exception of academic implementation data). They did not involve examination of students' continuous assessment records (formative evaluation) but students' perceptions of formative evaluation practices. Without additional data, it is difficult to determine to what extent teachers demonstrated high-quality pedagogy and objective assessment of students' learning under formative evaluations. Hence, the validity of the participants' responses becomes susceptible. Furthermore, the source of the data collected and the data analyses used here cannot yield definitive conclusions. While the ex-post facto design allows for testing questions based on the construct of the independent variable (perception of teachers' formative evaluation practices) which had already occurred and is investigated retrospectively, only with caution should the finding be interpreted

as causal. It is possible for a condition to precede an outcome without causing the outcome. However, a unified curriculum in Geography curriculum by the KICD for all the schools in the country acted as basis upon which conclusions were made that the same applied to other secondary schools.

Finally, the formative evaluation was as effective as the resources provided Michael (2009) by the respondents as some teachers, principals; Quality Assurance and Standard officers were not willing to respond to some of the questions in the questionnaire and document analysis because of feeling that the researcher was probing their competence at their places of work. Even though the assessment indicated the need for changes to be made partway through the process of implementation of the Geography curriculum, these can only be adequately addressed if there is sufficient information in place to address these concerns.

### **1.9 Conceptual Framework**

In order to obtain a conceptual framework for this study, it was found necessary to evaluate some of the factors that influence implementation of Geography curriculum in Form Three based on modified Tyler's goal attainment model Ramsay and Clark (1990) and Stufflebeam's (2010) Context Input Process and Product(CIPP) models as shown in figure 1.1 . Goal attainment model involves the statement of defined objectives against which school life and student implementation in their various aspects are measured and evaluated Ramsay and Clark (1990). Evaluation is the process of focusing on informative requirements needed by decision-maker; collection, organization and analysis of information using such technical procedures as measurement and statistics; and synthesizing of information so that it will be optimally useful information for judging decision alternatives Stufflebeam (2010).



Accordingly, evaluation means an examination of whether desired educational objectives (inputs) have been attained based on learning and teaching experiences (process) and examination of achievements (product) Ramsay and Clark (1990) and Stufflebeam (2010). The convergence of Tyler's goal attainment and Stufflebeam's CIPP models made them suitable choices in this study. Attainment of the objectives of teaching Geography curriculum was influenced by the factors mentioned in the study. The models to evaluate the factors influencing implementation of Form Three Geography curriculum in Lugari District was based on formative evaluation that was intended to address the problem of evaluation of the factors influencing implementation of Geography curriculum in secondary schools.

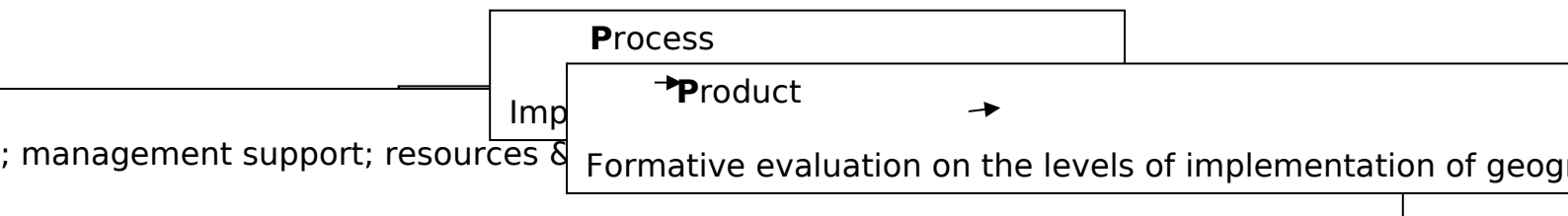
During the input, the factors influencing implementation of Geography curriculum were evaluated and potential strategies for improving the implementation assessed.

**Figure 1.1 Conceptual Framework on Evaluation of the factors influencing implementation of Form Three Geography curriculum in Lugari District.**

**Independent Variables**

**Dependent Variables**

The process entailed identification of the extent factors influencing implementation of Form Three Geography curriculum in order to anticipate and overcome these factors.



The product part involved measurements and interpretation of the factors influencing the implementation of the Geography curriculum. The information gathered was used to make comparison between expectations and actual outcomes. This helped in deciding whether to continue, terminate or modify the program. The models were found to be suitable as they sought to improve the implementation of the secondary geography curriculum in Lugari district.

### **1.10 Operational Definition of Terms**

**Attitude** - is defined as the way one thinks and feels about something or somebody. It is a state of mind. In this study, it meant the way teachers of Geography and Form Three students felt and thought about the Form Three Geography curriculum.

**Competence** - refers to a cluster of related abilities, commitments, knowledge and skills that enable a person or organization to act effectively in a job or situation. In this study it refers to the ability for the individual (teacher) to do a job effectively.

**Curriculum** - “curriculum” comes from the Latin word “currere” which means “a course to be run” Tanner and Tanner (1995) hold the view that curriculum means planned instructional experience designed to help learners develop and extend individual capability. This takes place in schools and is the result of the reconstruction of learners’ knowledge and experiences.

**Curriculum Evaluation** - is the assessment of achievement of the specified curriculum objectives. The specified curriculum objectives were those of the study research.

**Evaluation** - is the process of finding out how far the learning experiences as developed and organized are actually producing the desired results and the process of evaluation involves identifying the strengths and weaknesses of the plans.

**Formative evaluation** - (also called developmental evaluation or implementation evaluation) is undertaken by those performing the process while it's actually occurring. This can be used to determine the effectiveness of a process or program while this process is still happening.

**Geography Curriculum** - is one of the curricula of secondary schools in Kenya set by the Kenya Institute of Curriculum Development (KICD). In this study it referred to the 8.4.4 secondary school Geography curriculum started in schools in 2003.

**Implementation** - is the accomplishment of a given task measured against preset known standards of accuracy, completeness, cost, and speed. The study had the following tasks as indicators of the implementation: number of students taking the subject in Form Three; attitude of the students towards the subject; determination of involvement of management by way of advice for projects, trips, workshops, clubs, symposium, in-service courses; and teaching and learning resource availability.

**Innovation** - is the introduction of something new that deviates from the standard practice. In this study, the innovation is the secondary school Geography curriculum started in 2003 by KIE.

**Level** - is the relative degree, as of achievement, intensity, or concentration? The amount of something especially when it can be counted or measured. Levels in the study referred to the frequency and % responses of the sampled respondents in the study area.

**Management Support** - refers to officers such as the Quality Assurance and Standards officers, Principals, and Heads of department who provide technical and professional assistance to teachers of geography.

**Model** - is defined as a representation that displays the component of the item being represented, the relationship between these components, and how those components function either independently or together Gephart, 1978 in Ramsay and Clark (1990). The study's model was the conceptual framework of the study as shown in figure 1.1

**Resources/ facilities** - it is something that can be used for support. Mostly available for use if required. A source or supply from which benefit is produced such as teachers, buildings and textbooks.

## **CHAPTER TWO**

### **2.0 LITERATURE REVIEW**

#### **2.1 Introduction.**

This chapter covers a review of available literature related to the study. The literature review dealt with the following:

2.2 (a) Curriculum evaluation: A general overview.

(b) Curriculum implementation.

- (c) The geography curriculum in Kenya .
- (d) Teaching of geography as a subject.
- (e) The relevance of teaching geography to a learner.
- (f) Teaching methods.

2.3 Factors influencing curriculum implementation.

2.4 Recent studies related to curriculum implementation

2.5 Summary of the chapter

### **2.2 (a) General Overview of Curriculum Evaluation.**

Evaluation is the process of finding out how far the learning experiences as developed and organized are actually producing the desired results yet the process of evaluation involves identifying the strengths and weaknesses of the plans . Consequently, we will know in what respects the curriculum is effective and in what respects it needs improvement Schubert, W. (1986). Since education objectives are essentially changes in the behavior patterns of the student, then evaluation must appraise the behavior of students. The process of evaluation begins with the objectives of the educational program.

According to Goodman, R. M. (1998) evaluation is a crucial part of modern education. Despite the need to embrace the "everyone's a winner" mentality, evaluation is a crucial component of education. A student's needs and preferences can be known through evaluation and measurement. Evaluation is also used by colleges to determine which students can be admitted. While the specific purposes of measurement and evaluation can vary, there is one underlying theme: measurement and evaluation are

required to determine whether students are learning. This is well summarized by Leah K. (2009) that educational evaluations aim to measure the success of educators, learners, education programs and teaching methods through theory, research and data analysis.

### **2.2 (b) Curriculum implementation.**

A curriculum is a plan or program of all experiences that the learner encounters under the direction of a school Tanner and Tanner (1995). According to Gatawa (1990), it is the totality of the experiences of children for which schools are responsible. All this is in agreement with Shiundu and Omulando (1992), who define the curriculum as knowledge, skills, attitudes and values to be learnt. For others such as Beach and Reinhartz (1989) a curriculum outlines a “prescribed series of courses to take”; therefore curriculum implementation entails putting into practice the officially prescribed courses of study, syllabuses and subjects. The process involves helping the learner acquire knowledge or experience. It is important to note that curriculum implementation cannot take place without the learner. The learner is therefore the central figure in the Curriculum implementation process. Evaluation takes place as the learner acquires the planned or intended experiences, knowledge, skills, ideas and attitudes that are aimed at enabling the same learner to function effectively in a society Omar (1996).

Viewed from this perspective, Curriculum implementation also refers to the stage when the curriculum itself, as an educational program, is put into effect. Putting the curriculum into operation requires an implementing agent. Stenhouse (1979:P.4) identifies the teacher as the agent in the curriculum implementation process. She argues that implementation is the manner in which the teacher selects and mixes the various aspects of knowledge contained in a curriculum document or syllabus.

Implementation takes place when the teacher-constructed syllabus, the teacher's personality, the teaching materials and the teaching environment interact with the learner University of Zimbabwe (1995). Curriculum implementation therefore refers to how the planned or officially designed course of study is disseminated by the teacher to the learner through syllabuses, schemes of work, lessons plans and lesson notes.

Several scholars postulate that various factors influence curriculum implementation. Among others are the teachers, students, interest groups, the government and the society. Whitaker (1995) express the fact that the teachers' role in curriculum implementation is an autonomous one. They select and decide what to teach from the prescribed syllabus or curriculum. Since implementation takes place through the interaction of the learner and the planned learning opportunities, the role and influence of the teacher in the process is indisputable University of Zimbabwe (1995). If the teacher is to be able to translate curriculum intentions into reality, it is imperative that the teacher understand the curriculum document or syllabus well in order to implement it effectively Klein (1970). If the curriculum is what teachers and students create together, as expressed by Ayako (2006), then the teacher must play a more significant role in designing the curriculum. Teachers must be involved in curriculum planning and development so that they can implement and modify the curriculum for the benefit of their learners.

Learners are also a critical element in curriculum implementation. While teachers are the arbiters of the classroom practice, the learners hold the key to what is actually transmitted and adopted from the official curriculum. The official curriculum can be quite different from the curriculum that is actually implemented. The learner factor



influences teachers in their selection of learning experiences, hence the need to consider the diverse characteristics of learners in curriculum implementation Muthwi, (1981). For example, home background and learner ability can determine what is actually achieved in the classroom.

No meaningful teaching and learning can take place without adequate resource materials. This applies to curriculum implementation as well. For the officially designed curriculum to be fully implemented as per plan, the government or Ministry of Education should supply schools with adequate resource materials such as textbooks, teaching aids and stationery in order to enable teachers and learners to play their role satisfactorily in the curriculum implementation process. In curriculum implementation University of Zimbabwe (1995), it is suggested that the central government must also provide physical facilities such as classrooms, laboratories, workshops, libraries and sports fields in order to create an environment in which implementation can take place. The availability of resources and facilities influence the quality of curriculum implementation.

Interest groups are important in curriculum implementation. They include parents, parents' and teachers' associations, school development associations (SDAS) and school development committees (SDCS), religious organizations, local authorities, companies and private school proprietors. These groups can influence curriculum in the following ways: i) Provide schools with financial resources to purchase required materials; ii) Demand the inclusion of certain subjects in the curriculum and iii) Influence learners to reject courses they consider detrimental to the interests of the group. It is therefore important to involve these groups at the curriculum planning stage. Curriculum implementation cannot be achieved unless it has been made possible

through the supervisory function of the school principal. The principal does this through: i) Deploying staff, ii) Allocating time to subjects taught at the school, iii) Providing teaching and learning materials, and iv) Creating an atmosphere conducive to effective teaching and learning. This is expressed by Whitaker (1995) that principals must be readily available to address the concerns of the teachers, they are to monitor and guide curriculum implementation through ensuring that schemes of work, lesson plans and records of works are prepared regularly. The principal maintains a school tone and culture that create the climate of social responsibility. For effective curriculum implementation does not take place in a school where the principal is incapable of executing supervisory functions. This is well summarized by Gross et al; (1971) that the degree to which a curriculum is implemented is a function of five conditions which must be present during implementation. They include attitude of users as well as stakeholders of the curriculum, support by educational managers, availability of resources and facilities, degree of clarity and awareness about the scope of the curriculum by the school organization, the extent to which members of the school organization possess the capabilities and competencies to carry out the process of implementation, existing organizational arrangements, willingness to expend the time and effort to implement the curriculum.

The present study sought to evaluate the teacher's and learner's attitude towards the geography curriculum, management support, adequacy of resources and facilities for teaching and learning of Geography and teacher competence in handling the geography curriculum in secondary schools in Lugari District.

### **2.2 (c) The Geography Curriculum in Kenya.**

The study of Geography in Kenya is expected to describe and analyse the location of places on earth and the spatial distribution of phenomena in their varied

interrelationships as they influence human activities. The subject is dynamic as it responds to constant environmental changes. Geography therefore transcends boundaries of other subjects in an attempt to describe the earth and its diverse elements. As such, the subject interrelates with all the other disciplines making it both humanity and a science. The study of Geography involves a process of discovery and enables the learner to acquire knowledge and develop positive attitudes and skills of inquiry, critical thinking and decision making. This prepares the learner to cope with the demands of the modern society. This syllabus has attempted to expose the learner to a systematic study of both physical and human aspects of Geography with specific local examples drawn from Kenya as well as comparative studies from other parts of the world.

The syllabus gives special emphasis to practical Geography thus providing the learner with the opportunity to demonstrate the ability to manage and conserve natural resources. Emphasis has been placed on a learner-centered approach and the use of varied learning resources. This syllabus builds on the knowledge, skills and attitudes acquired at the primary school level, at the same time preparing the learner for further studies. The content is developed from basic geographical concepts to more complex ones in relation to the psychological development of the learner. In the syllabus, field-work, map work, photograph work and statistical methods are introduced early in the course and their treatment is amplified progressively across the levels. The Geography of Kenya is spread and integrated in the four-year course in the secondary school cycle.

Nekesa,( 1996) expresses the fact that Geography as a subject is important as it attempts to discover, describe and account for the distribution and inter-relationship of various phenomena on the surface of the earth in relationship to man's activities.

According to Michael (2009), geographers recognize the dynamic nature of the earth's physical systems which change with weather, climate, drifting of continents and sculpturing of coastal landforms. Geography relies on information provided by other sciences to help understand the form and distribution of earth phenomena. It is therefore an "integrative science" acting as a link between physical sciences and social sciences hence of value to any curriculum. This is summarized by Rita of the Royal Geographical Society (2008: P. 2) that: 'If the aspiration of schools was to create students who are active and well rounded Citizens, then there was no more relevant subject than Geography'.

Mbiti (2002) supports the fact that Geography is a science and practicals should be used in teaching and making the subject sensible to learners. Through learning of the environment, a learner discovers the value of his surrounding and hence appreciates it. They learn of economic activities such as fishing, trade, tourism, agriculture, mining, industry and transport & communication which act as the backbone of economic development of the country. Students learn of negative impacts of man's activities such as pollution, desertification, global warming, erosion, flooding and others like over population hence think of how to rectify such situations. Due to its relevance it is expected that many students study the subject as it is of great value to the nation. The researcher found the study relevant as Performance indicators shape an implementation, and the choice of performance indicators impacts the resources required to conduct the study and the utility of the study results. Gortmaker (1996).

#### **2.2(d) Teaching of Geography as a subject.**

Teaching is an integral part of curriculum implementation worldwide. Geography is one of the subjects offered in the 8.4.4 system of education in Kenya. Through curriculum reforms, the subject has undergone several changes to make it suit the

needs of the learners and the entire society. According to KIE (2002), the study of Geography describes and analyses the location of places on earth and the spatial distribution of phenomena in their varied interrelationships as they influence human activities.

Mwenesongole (2005) observes that Geography is not simply a study of names of places, towns, rivers and mountains, but a scientific description of different physical environments where different people of the world live and where they have derived the past, how to utilize their environment and also what they are doing to maximize the exploitation and conservation of the natural resources for the future. This is echoed by Michael (2009), that Geography explains the past, illustrates the present and prepares us for the future.

According to the Kenya Institute of Curriculum Development KIE (1988), Geography is a dynamic subject as it responds to constant environmental changes. It is a transitional subject lying between the physical sciences, earth sciences and social sciences. Because of its centrality in curriculum, Geography borrows a lot from other subjects taught in schools. Shin (2006) supports the fact that Geography like the science subjects should be taught as a practical subject as it promotes students geographic skills such as thinking geographically, analyzing data, making inferences on spatial data and assist in adoption of project based learning and teaching for effective implementation of the curriculum. Wafula (1990) and Achola (2003) concur that for effective teaching, class activities and resources such as field trips, maps, models, globes for illustrations must exist in teaching to make the subject lively and meaningful to students. Data collection through field work recording, analyzing, interpretation and presentation form an integral part of the subject.

From the KIE (2002), it was noted that effective teaching of Geography could be through the sharing of the teaching and learning resources by the teachers within the schools or other learning institutions. Resources could be improved through project work, collection of materials during field excursions; teachers can share globes, weather measuring instruments, graphic resources and textbooks. Also radio\_cassettes and computers can be used in reinforcing the evaluation of the Geography curriculum.

Tan (2005) concurs with the KIE (2002) that teachers need to integrate new ideas into use of the innovation by collaborating with one or more colleagues for achieving greater impact. This can be done through regular meetings where resources and information are shared in an effort to increase learning. In some countries such as Turkey, Pottle (2001) expresses that computers are used in teaching of Geography. Further, Slater (1987) and Balderstone (2000) support the fact that selecting teaching strategies to teach particular curriculum content is as important as selecting content itself. This calls for need for teachers of Geography to learn different teaching strategies to enhance certain aspects of teaching the subject.

In Kenya, for effective implementation of the Geography curriculum, the KIE has divided the syllabus into three branches: physical Geography which acts as man's habitat, human and economic Geography which reflect man's activities in the physical environment and practical Geography which deals with the skills of organizing, interpreting, explaining, presenting and synthesizing of data. According to Shiundu and Omulando (1992), the success of any curriculum relies on the set objectives as they are to bring behavioral changes in the learner. As such teachers are to ensure that the set objectives are clearly stated based on the needs of the learners. The KIE (2002) set objectives to be achieved by Geography learners as follows: appreciate the learning

of Geography ; recognize different types of environments and manage them for individual, national and international development; identify and explain weather phenomena and their influence on the physical environment and human activities; identify and compare economic activities in Kenya and the rest of the world and acquire appropriate knowledge, skills and attitudes as a basis for technical and industrial development. To achieve the set objectives, the KIE (2002) has encouraged teachers to use a variety of resource materials and teaching methods such as field trips, taking of measurements, collecting study specimens, carrying out experiments, taking photographs and use of discussion groups. As use of only one method may not enable the learner to realize the set objectives.

#### **2.2(e).The Relevance of Teaching Geography to the Learner.**

Geography is one of the disciplines that help to provide order in children's real and virtual worlds. Geography is a discipline that offers knowledge and skills to understand why people in different places arrange their environment in different ways within natural constraints Gatawa (1990). Submissions from Geographers provide other reasons why it is important for students to study Geography. Students learn a range of skills including problem solving, critical thinking, map reading and the ability to broadly investigate issues at the micro and macro levels. These skills are transferable beyond their years at School into adulthood and future careers.

Underpinning Geography's place in the curriculum is its role in the development of children's spatial and environmental understanding, building on their experience in the environment, of their own and visited places and, increasingly through a variety of media, of real and virtual places and environments in the wider world Mwenesongole (2005). This requires skills in reading, interpreting visual and verbal media, photographic (still and video, authentic and manipulated) images, maps of many types,

models and scales, with a wide range of graphs and charts and many Styles of written information from the daily press to encyclopedia summaries. Children need the skills to extract appropriate information relevant and appropriate for the enquiries and investigations they are making, including literacy and numeracy and undertaking fair tests.

According to Stoltman (1990), students have a natural curiosity about the characteristics of places in their world and Geography enables them to gain a better understanding of places in their own environment and those beyond their own direct experience. In order to gain an understanding of the characteristics of places and of the spatial distribution of these characteristics, Geography draws on the combined knowledge from the natural sciences (as in the study of the hydrological cycle), the social sciences (as in the application of the concepts of agglomeration economies or environmental perception) and the humanities (as studies of personal meaning of places). This gives the subject considerable value in broadening a student's education.

Geography is useful in developing world knowledge and understanding varied spatial phenomena Stoltman (1990). The subject provides the background knowledge essential to understand many important global issues. Examples of these issues include the: implications of economic and social differences, effects of international migration on communities and regions, consequences of globalization, changing availability of water resources, consequences of climate change, impact of urbanization on fragile natural environments, impact of development on natural resources, degradation of land and its impact on biodiversity promotion of stewardship of the earth and sustainability of using environmental resources Gatawa, (1990). Students gain sound world knowledge and this is the main justification for including Geography as a subject in



the curriculum. Including Geography will ensure that students have a well rounded education that includes a sound knowledge of the world.

Geography allows students to bring together knowledge and skills for an understanding of both the natural and human elements of the world and how they relate to each other. This enables students to better understand the impacts of humans on natural environments. As such, Geography is the subject in which students are educated about, in, and for the environment and society in which they live Tanner and Tanner (1995).

Tanner and Tanner (1995) add that students need knowledge of the Geography of their nation and its distinctiveness. Students need to know about the environmental, economic, demographic and social characteristics of the places in which they live, work, study and play, and how and why these characteristics are changing. They should also have knowledge of the places with which they are connected through environmental processes, population movements, trade and investment, tourism, cultural influences and political relationships.

Through studying Geography students are able to examine some of the important issues facing individuals, communities and governments Tanner and Tanner (1995). With this knowledge they will be better equipped to make informed decisions on personal, local, regional and national issues in the future. These issues include the: i) Effects of human settlement on environments, and the ways in which these effects are being managed; ii) Engagement of different cultural groups (e.g. Indigenous, settler, immigrant) with the environment; iii) Management of water resources and drought; iv) Management of coastal areas, where human pressures interact with physical processes to threaten some of the most popular environments and v) Impact of centralized

population in a few cities, and how the problems resulting from the growth of these cities might be managed Tanner and Tanner (1995).

Gatawa (1990) stresses the importance of Geography in preparing students for global citizenship. One of the elements of global citizenship is knowledge of the vast economic and social inequalities existing in today's world and how these inequalities may affect our lives. Students who will live in this global village much longer than we will need to understand that globalization's negative outcomes - exploitation of poor countries, for example-can affect their own lives. Our interdependence is economic, and it is also environmental. Global problems can only be solved globally Gatawa, (1990).

Given its holistic nature, Geography represents an excellent curriculum framework for engaging with some of the great challenges facing humanity-climate change, water and land management, global inequalities, sustainable economic growth, habitat protection and management, the impacts of rapid urbanization and our future energy needs. It also provides a level of cultural understanding that enables students to better understand some of the important Geopolitical issues and challenges facing the world. Geography develops students' participatory knowledge and skills enabling them to become informed decision makers at a local, national and global scale. In a global world we need future generations to understand biophysical processes and the consequences of interfering with them, how and why societies interact differently with biophysical environments and interactions between countries and their impacts on one another University of Zimbabwe (1995).

The Kenya Institute of Education (1988) supports the fact that Geography contributes greatly to the acquisition of skills for the study of the environment lives. The

environment offers resources which are a basis to national development. Ominde (1971) asserts that development in Africa requires the role of Geography for transformation of our natural resources and development of our human resources to be correctly appreciated. Africa and the rest of the world are currently facing many problems which are as a result of nature or associated with human activities. These problems have led to the deterioration of the environment hence they cannot sustain development. Among the problems facing man include floods, erosion, global warming, drought, overpopulation and spread of diseases. Since Geography contributes a lot to the acquisition of skills for the study of the environment, it is necessary that many students study it at secondary and university levels so as to be employed in areas such as meteorology, environmental conservation, geology, demography and energy conservation so that it helps man eliminate the aforementioned problems.

Unfortunately schools are recording a drop in enrolment and performance in Geography as a subject. Christine (1996) has drawn attention to the deficiencies of school Geography in teaching students about knowledge of place location. And this criticism about the deficiencies of school Geography in teaching students about knowledge of place location has added to the general deficit view of Geography education which revolves around an attack on the basis of a lack of rigour and over-politicization in integrated and thematic Geography courses.

This study sought to evaluate how curriculum implementation factors could be influencing the implementation of the Geography innovation in secondary Schools in Lugari District and seek for remedies as the subject is viewed as of great importance in the present society.

### **2.2 (f) Teaching Methods.**

In Kenya, teachers have been charged with mediocrity in applying pedagogy and incompetence in class performance which has had great impact on curriculum implementation. This was further supported by Clark (1986) observed Sifuna and Kiame (2005) support the fact that to achieve set objectives, teachers are expected to apply the correct methods of instruction. Planning is viewed as very important in curriculum implementation as it gives the lesson structure; organization and sequence which helps ensure optimum time for given task. The study sought to establish whether teachers used the correct pedagogy in giving instructions to students for quality performance.

Regan and Leithwood (1974) recognized inadequate teachers' behavior as one primary block to successful curriculum implementation. Teachers need to be trained in the complex behaviors or skills that are necessary to use in the curriculum. Shiundu and Omulando (1992) posit that:

In-service education helps acquaint the practicing teachers with the latest innovation in the curriculum of their subject area. In this way, the teacher is most able to cope with new demands in his area of specialization as well as new approaches and methodology intended to enhance teaching and learning. In-service training is to improve the teachers' professional knowledge, skills and attitudes in order that they can educate learners more effectively. During implementation of new programs, in-service courses assist to cater for differences that may have arisen during the pre-service training. Through research it has been noted that teachers resort to traditional teacher-centered instructional methodologies even after being exposed to the new methods of teaching

during the pre-service training. The study calls for effective teacher training and in-service courses which form an integral part of curriculum implementation.

### **2.3 Factors influencing curriculum implementation.**

#### **(i) Attitude of Teachers and Learners towards the Innovation.**

According to the oxford advanced learners dictionary (6<sup>th</sup> edition), attitude refers to one's thinking or feelings towards a given object, situation or person. Attitude could be favourable if positively directed towards an idea or unfavourable if negatively directed towards a target. The word attitude (from Latin) is defined within the framework of social psychology as a subjective or mental preparation for action. It defines outward and visible postures and human beliefs. Attitudes determine what each individual will see, hear, think and do. They are rooted in experience and do not become automatic routine conduct.

Attitude means the individual's prevailing tendency to respond favorably or unfavorably to an object (person or group of people, institutions or events). Attitudes can be positive (values) or negative (prejudice). Social psychologists distinguish and study three components of the responses: a) cognitive component, which is the knowledge about an object, whether accurate or not: b) affective component: feelings towards the object and c) behavioral component, which is the action taken towards the object Stoltman (1990).

Teachers' styles, and mainly their attitudes, are strong context outcomes, rooted in experience and do not become automatic routine conducts, in the sense that they are developed via very slow interactions (actions) and become well established constructs

for each individual only after some time. In that sense attitudes can be modified only by each individual, when he/she becomes aware, via elements and evidence, that new postures would be better to deal with the world around.

According to Nemser-Feinman and Floden (In Wittlock, 1986) teachers go through three stages when they start teaching: adequacy, mastery and impact awareness of the effect of their teaching on the students. Pre-service courses should prepare the future teacher for adequacy and mastery. In-service programs should help the teacher to actualize their knowledge with the acquisition of adequate instruments and methodologies to solve problems.

Hawes (1979) postulates that the task of curriculum implementation involves some main processes as “changing attitudes of policy makers, administrators, teacher trainers, supervisors, teachers and learners. Gross et al (1971) noted that when teachers had a positive attitude towards an innovation, they were willing to spend time and efforts on the implementation process. Munguti (1984) studied factors affecting the teaching and learning of mathematics in Machakos district. He observed that teachers’ attitude affected learning mathematics as they acted as role models in the classroom and students mostly imitate the attitude of teachers.

Achola (2003) observed that teachers can develop favourable attitudes to curriculum innovations through in-service training. Teachers develop critical, empirical and adaptable attitudes to changes in the curriculum of their subject area. According to Achola (ibid) students need to develop favourable attitudes towards school subjects if they are to perform excellently. Olembo (1992), observed that motivation and stimulation involves maintaining competency and interests in the work of a teacher. It promotes enthusiasm, commitment, creativity, self-discipline and participative

management which minimize frustration and stress in teachers. Positive attitude can be instilled in teachers and students through provision of media resources, promotion of teachers and provision of in-service education.

Driver and Bell (1986) noted that learners had the final responsibility for their learning. Positive attitudes led to greater achievements while negative attitude led to little achievement. Motivation is away in which Geography teachers can make students develop a positive attitude towards the subject. Apart from teachers and students, stakeholders need to have a positive attitude towards curriculum implementation. Masinjira (1996) carried out a study on availability of resources and facilities for teaching social education and ethics. The study revealed that teachers had a positive attitude towards the subject and this had a great bearing on the successful implementation of the curriculum on the teachers and students attitude. The present study sought to evaluate the kind of attitude held by teachers and students towards the Geography curriculum in secondary schools in Lugari district.

**(ii) The Management Support towards Curriculum implementation.**

Bennaars, Otiende and Boisvert, (1994), posit that school management which include the Principal, HODs and the DQASO play an important role in curriculum implementation. From research, central administration is viewed as vital for change in practice. Sarason (1972) comments that a leader plays the most crucial role in the process of curriculum implementation “he or she is the most visible and influential model of how one should think and what one should talk about, how one deals with the reality and how one anticipates and deals with any problems that arise. This is supported by Mbiti (1974) that the principal must realize that their major tasks include among others, seeing that necessary mandatory resources are available for the school

use and to motivate staff and produce a lively school spirit as well as excellence in work performance.

Fullan (1982) states that teachers and others do not take change seriously unless central administrators demonstrate through actions that they should. The chief executive officers and other key central educational administrators are to set the conditions for implementation to the extent that show specific forms of support and active and understanding of realities of attempting to put change into practice.

Ayot and Patel (1982) and Olembo (1992) posit that the school administration should take responsibility for the selection and procurement of instructional materials. Funds must be available for purchase of instructional materials. They argue that in the actual selection of instructional materials teachers should play a great part. Administrators should devise ways by which teacher's participation in instructional matters including selection of instructional materials can be encouraged. In so doing teachers will be motivated to work towards achieving the set goals. Ayako (2006) found that change is most successful when those affected are involved in planning and that nothing as much makes a person resistant to new ideas as a feeling that change is being imposed upon them.

According to Eshiwani (1993), the principal, administrators and teachers in a school need to work together in order to achieve successful implementation. The role of educational administrators generally is direction, control and management. Direction deals with school leadership, which is centered in curriculum development, supervision of class instruction and training of teachers. Fullan (1982) support the fact that school improvement can be realized when teachers and educational administrators observe each other's teaching and provide each other with useful implementation



advice. They can share the burden of curriculum development by planning and preparing teaching materials together. This can reduce teachers' resistance to change as they may consider themselves as part of the system which may enhance teaching and learning processes.

Mbiti (2002) observed that supervision is one of the requirements in administration. It concerns tactics and proper management of personnel. Supervision is working closely with teachers to establish their problems and needs of students, building strong morale and securing effective team work amongst teachers and providing assistance to enable them develop greater competence. As such the management is important in organizing in-service courses and seminars for teachers. Eshiwani (1993) suggested that one of the important roles of inspectors (DQAS) is organizing in-service courses and seminars for teachers so as to keep them up-dated with the new knowledge and teaching methods. Olembo (1977) made a summary of ways in which the DQASO can support teachers in implementation of the curriculum as follows:

- Working closely with teachers to establish problems and needs of students.
- Providing assistance to teachers so as to develop greater competence in them.
- Assisting new teachers to translate theories learned in teacher's training colleges into classroom practice.
- Providing guidance and advisory services in all schools especially those related to curriculum.

Unfortunately, though the government has formed the directorate of quality assurance and standards (DQAS) through Kenya education sector support program (MOE, 2003), little has been done in provision of in-service training and advisory services to

teachers. Frequently the DQASO has expressed shortage of man power with the current expansion of schools, shortage of funds from the Ministry of Education, heavy workloads for the officers, lack of supervisory skills due to insufficient in-service courses and poor transport and communication means to the learning institutions.

The present study sought to answer the question: what problems do the principals, HODs and DQASO face in their work in supervision of the Geography curriculum at secondary school level.

### **(iii) Adequacy of Resource Materials and Facilities.**

For successful implementation of the Geography curriculum, adequate and appropriate resource materials and facilities are required by teachers and learners. The resources enable the teacher to set the correct content objectives and the learner to understand the subject to achieve the set objectives for the given content Mukwa and Patel (1979).

Similarly Oketch and Asiachi (1992) contented that it is the kind of resources available that have great implications on what goes on in the school today. Craig (1990) supports the fact that shortages of monetary and other material resources are often the proximate cause of implementation failures. This has the implication that materials should be available for the successful implementation of any curriculum.

Shiundu and Omulando (1992) posit that a new program require relevant and adequate facilities. Even before implementation, physical facilities must be prepared and materials purchased to ensure successful activation of the program. Accordingly, without instructional materials, almost no learning can be expected to occur. Ensuring the availability of essential in-puts particularly textbooks is a prerequisite both for

quality and expansion of education, World Bank (1988). George (1962) stresses the importance of resource materials in the implementation of innovations. The ability of the teacher to implement curriculum change is a function of availability of the tools for the job. Mbiti (1974) observed that curriculum ventures cannot be launched without funds to support them. The educational budget must be prepared in such a way that both quality and quantity requirements are accommodated.

Bogonko (1992) commented on resource discrepancies in Kenyan secondary schools. He noted that there was unfair distribution of educational facilities in secondary schools which enabled some areas and schools to do better in national examinations than others. Schools were ranked in four categories: national, provincial schools, district and private schools. National and provincial schools had better facilities and were given first priority in selection of students joining Form One. District schools selected Form Ones from the remains. The district schools were ill equipped in terms of resources and facilities which affected their performance. Kochhar (1990) and Bogonko (1992) concur with Muthwi (1981) that teachers may have the competence and positive attitude but if the resources are not adequate, their effort may be in vain.

Mutema et al; (1992) observe that instructional materials especially audio visual aids and other equipment are useful both for the teacher and the learner because they help the teacher to clarify certain points in the lesson. This is supported by Wafula (1990) who studied teaching of Geography at ordinary level in harambee schools of Bungoma district. Findings were that lack of proper textbooks, teaching aids and libraries affected the teaching of Geography. The study will attempt to evaluate how learning resources and facilities may influence the implementation of the Geography curriculum in secondary schools in Lugari District.

A study conducted by Kawela (1984) on Geography teaching in primary schools in Tanzania indicated that supply of books and other teaching aids by the Institute of Education was minimal or non-existent. This was attributed to the poor state of the economy, which, he believes had affected all spheres of life. His report further stated that the schools were not entrusted with money to buy books and materials according to their needs. This is echoed by Wafula (1990) who found that lack of textbooks, teaching aids and libraries affected the teaching of geography at ordinary level in harambee schools of Bungoma district. The literature review in this section has indicated that instructional resources and facilities are vital in implementation of any given curriculum and the administration should ensure that teachers have the required facilities for effective performance. The present study sought to establish whether or not Form three Geography teachers had the required resources and facilities for the implementation of the Geography curriculum.

#### **(iv) Competence of Teachers.**

According to the Oxford Advanced Learners Dictionary, (6<sup>th</sup> edition), competence refers to a skill required by an individual to perform a given task as anticipated. In this case, the teachers of geography need to have the right skills and knowledge to disseminate to the learners. According to Fullan (1982), the success in implementation of any curriculum innovation is vested in the competence of teachers. Only competent teachers are effective and efficient in performance. Gross et al; (1971) posit that for effective curriculum implementation there is need to consider the quality of the implementers who are charged with the responsibility of interpreting the new curriculum into practical terms.

According to Dunkin and Biddle (1970), teacher competence, flexibility and ability to innovate largely depend on their level of education and training. Without the correct knowledge the teacher will not be able to interpret the curriculum and implement it successfully. A teacher must have the necessary skills to execute her duties effectively. These calls for in-service courses to enable one acquire new skills and roles. This is important as the teacher is an implementation agent who is expected to make use of the curriculum within a given situation Dianne (1980).

This is supported by Eshiwani (1983) that the new mathematics innovation failed for there was no significant training for teachers who were expected to implement it. He recommended that teachers need to undergo appropriate training both pre-service and in-service education for effective implementation of the innovation. Pre-servicing training prepares teachers before recruitment whereas in-service training equips teachers with knowledge that must be learned on the job.

Baker and Schultz (1979) posit that for effective performance, teachers must observe procedures to give so as to provide practical and assessment of desired learner's behavior and make the lesson content more interesting with real life situations and employ appropriate learning aids.

#### **2.4 Recent Studies on Curriculum Implementation.**

Shiumba (1993), quoted by Pale (2005) surveyed the attitudes of students of Form 2 and Form 4 towards science subjects in Zimbabwe. In his study, he assumed that attitude towards science subject would serve as an indicator of students' willingness and potential to acquire and utilize scientific knowledge. After data analysis it was noted that there was significant difference between attitudes of these 2 classes. Form Two students reported a significantly positive and favorable attitude towards the

subject while the Form Four students had a negative attitude. Shiumba (ibid) cited the teachers influence as a possible reason for the impoverished attitudes of the students towards the science subjects. The teachers of science reported lack of facilities and resource materials to support hands-on-activities. Shiumba (ibid) recommended that the pre-service teacher education should not rely on convenient lecture method as this could not include positive attitude towards sciences by prospective teachers. While Shiumba (ibid) dealt with only science subjects the present study dealt with Geography as a humanity subject. Unlike in the present study, Shiumba's study did not focus on factors such as management support towards curriculum implementation and teacher competence. For this study Form Three students were used unlike Shiumba who used Form Two and Form Four students in his study.

Muigei (2001) carried out a study "availability and use of non-projected media resources in teaching Geography in secondary schools in Uasin Gishu district." The analysis of the study indicated that most of the non-projected media resources that are suitable for the teaching of physical Geography topics such as globes and maps were inadequately supplied in most of the sampled schools. The few media resources that were available were poorly maintained and the schools did not have adequate storage facilities. It was recommended that teachers training institutes should put more emphasis on production and use of media resources in their training programs. School administrators were to ensure that teachers had the required materials and media resources necessary for implementation of the Geography curriculum.

Maranya (2001) carried out a study of the supervisory roles of secondary school head teachers in curriculum implementation in Machakos district. He recommended that school principals were to arrange for individual assessment and guidance in schools to

teachers. From the study there was poor assessment and supervision of teachers' hence poor performance in most of the subjects. The study also established that the Ministry of Education and human resource development (DQAS) did not send officers to schools to evaluate teachers which led to poor performance.

Whereas Muigei (2001) studied use of non-projected media in teaching of Geography in Uasin Gishu district, and Maranya (2001) studied supervisory roles of secondary head teachers in curriculum implementation in Machakos district, the present study considered other curriculum implementation factors such as teachers' and learners' attitude towards the Geography curriculum, management support, adequacy of resources and facilities and teacher competence in implementation of Geography curriculum in Lugari district.

Mukhebi (2006) studied the challenges facing English teachers in implementation of the English curriculum in schools of Bungoma district. The findings were that teachers of English lacked a clear understanding of the curriculum innovation especially on objectives after merging literature and English language during the advent of the 8-4-4 system of education in Kenya. Teachers lacked competence in the subject, in-service courses were rarely organized, schools lacked important resource materials and facilities, the English syllabus was too wide to be covered within the set time, students and teachers lacked management support during the implementation of the curriculum. He concluded that 8-4-4 secondary school English curriculum was poorly implemented. He recommended that there was need for in-service training for teachers to enable them improve on implementation of the innovation. There was need to equip schools with adequate resource materials and facilities, there was need to revise English curriculum and to intensify supervision and inspection of schools to improve

on performance. In his study, Mukhebi (ibid) looked at the implementation of the English curriculum in Bungoma district, yet the present study looked at the Geography syllabus as it is equally important as the English subject in the Kenyan curriculum setting. This study also investigated whether these factors also influenced the implementation of the Geography curriculum in secondary schools in Lugari District.

### **2.5 Summary.**

This chapter presented a review of literature related to the study. The first section dealt with the: a general evaluation of curriculum, curriculum implementation, teaching of geography in Kenya, the relevance of Geography to learners in secondary schools in Kenya, and the second section looked at the propositional and empirical literature pertaining to the implementation of curriculum innovations which indicated that for effective and efficient implementation of curriculum, certain factors are essential. They include a positive attitude by teachers and learners towards the innovation, management support towards implementation of the innovation, adequacy of resources and facilities, and teachers' competence in giving instructions. These factors must exist for effective implementation of the curriculum. From the reviewed empirical studies, it was clear that the issue of implementation of the Geography curriculum had not been addressed well in secondary schools in Lugari District hence need for the present study. It was necessary to establish the theoretical aspects influencing Curriculum implementation and examine factors that relate to the implementation of the Geography curriculum in secondary schools in the District.



## CHAPTER THREE

### 3.0 RESEARCH DESIGN AND METHODOLOGY

#### 3.1 Introduction.

This chapter describes the location of the study area, research design, study population, sampling procedures used in development of research instruments, description of the pilot study, validity and reliability of research instruments and procedures for data collection and analysis.

#### 3.2 The Study Area.

The study was carried out in secondary schools in Lugari District of western province Kenya. Recently the creation of Matete District saw Lugari District lose one of her divisions. This led to a decrease in the number of secondary schools within the District. At the time of the study, the District had three divisions with forty secondary schools. Matete division had the least number of schools (7); Lugari division had (16) while Likuyani had the highest number (17).

The District is bordered by Eldoret North and Matete Districts to the South, Bungoma to the West, Eldoret North to the East and Trans-Nzoia to the North (see appendix H). The District occupies 670.2km of land including the Lugari forest. By the year 2008 the District had a population of 300,578 people. There were 11,510 secondary school students and 475 secondary school teachers (LDDP, 2005-2009). The choice of Lugari District for this particular study was guided by the fact that there has been persistence poor performance in Geography in most of the schools contrary to the anticipated levels of implementation DEO (2010). Similarly, despite the government's efforts to streamline the 8-4-4 Geography curriculum, students' performance in KCSE Geography has persistently been unsatisfactory. This could be attributed to among

other factors the inappropriate implementation of the Geography syllabus which is reflected in the learners' poor performance KIE (1988).

### **3.3 Research Design.**

The study was conducted through survey design in order to improve (Ericksen ,1989) on the shortcomings of the implementation of Geography curriculum. This will generate suggestions on how to improve weak points on the implementation of Form Three Geography curriculum in Lugari District. The study was concerned with evaluation of the factors influencing implementation of Form three geography Curriculum in Lugari district. It was specifically intended to establish, determine and evaluate the relationship between factors and implementation of Form Three Geography curriculum as independent and dependent variables respectively. Such issues are best investigated through descriptive survey as it enables the researcher to reach many respondents and to collect original data for the purpose of describing and measuring of characteristics of a population which is too large to be observed directly. This design was deemed best in collection of data especially on educational programs while they are still being developed, Mugenda and Mugenda (1999).

### **3.4 Study Population.**

The study involved 350 Form Three Geography students, 20 teachers of Geography 20 Heads of humanities department, 20 principals and 1 DQASO. This constituted (411) respondents for the study.

### **3.5 Sample Size and Sampling Procedure.**

The selection of the research design and data collection methods determined the general protocol for taking measurements that were used in the evaluation Robson et al. (2001) of the factors influencing implementation of Form Three Geography curriculum in Lugari District. This consisted of selecting data collection methods, data

collection techniques, and determining who will be studied and when Frechtling, (2002). A sample of twenty secondary schools was selected from forty schools in Lugari District by stratified random sampling technique to ensure that boys' schools, girls' schools and mixed schools were all represented in the sample. Twenty schools represented 50 % of the secondary schools in the district. Selection of this sample was based on the fact that 30 % and above of the accessible population can be used (Gay, 1983 in Mugenda and Mugenda (1999 P.42). Slips of paper each bearing the name of the school and compiled according to each stratum were folded and put in a small box. The box was shaken and the required number of schools was picked randomly from each category.

The number of schools selected from each category depended on the number of schools listed under that category as indicated in Table 3.1. For the boys' schools, because of being few in number a complete census was used. The selected schools formed the sample and participated in the study. At school level the researcher applied simple random sampling to select eighteen Form Three students who filled the questionnaires. Eighteen slips of paper labeled "yes" and the rest labeled "no" were folded and put in a box and shaken thoroughly. Students who picked papers labeled "yes" participated in the study. Two schools had less than 18 students thus one gave 11 students and the other one gave 15 students to participate in the study. Thus 350 students were sampled for the study.

**Table 3.1 Schools Selected for the Study by Category**

Category of school	Number of schools in the District	Number of selected schools in the district.
Boys' schools	04	04
Girls' schools	07	05
Mixed schools	29	11
Total	40	20(50 %)

Simple random sampling was used to ensure that each school in each category and each student selected had an equal chance of being selected and included in the study Kerlinger (1983). All schools with eighteen or less students participated in the study. Form Three students were chosen to participate in the study because they had been exposed to Geography curriculum from primary school and hence were most likely to provide responses that are more realistic. These students were also preferred because they had made their subject choices in preparation for the KCSE examinations. Principals, Heads of department, teachers of geography of the sampled schools and DQASO were purposively sampled for the study as they were expected to have pertinent information in sampled schools on the levels of implementation of the Form three geography curriculum.. According to Table 3.2, a sample size of 411 respondents participated in this study.

**Table 3.2 Study Sample Size**

Respondents	Target Population Units	Sampling Units	% of Respondents
Form three Geography Students	700	350	50
Teachers of Geography	60	20	33
HODs	40	20	50
Principals	40	20	50
DQASO	03	01	33
<b>TOTAL VALUES</b>	<b>843</b>	<b>411</b>	

Majority of the respondents were students 350 (50%) because they are the immediate consumers of the Form Three Geography curriculum hence the best in evaluating the effectiveness in implementation of the innovation. The principals and the Heads of department were few in number as there is only one in a school at a time, 20(50%). Teachers of geography were also a few 20(33%) as only the teacher currently handling the Form three classes participated in the study. The main factor considered in selection of the sample size was the need to derive adequate and manageable data. The teachers, principals and the DQASO were picked on as respondents as they direct and manage the implementation of the curriculum in the district.

### **3.6 Research Instruments.**

Researchers prefer using methods that provide high accuracy, with low cost, rapid speed and maximum management demands and administrative convenience Warwick and Lininger (1975, P. 8). Basing on this fact, a combination of the following research instruments was used in this study for complementary purposes: questionnaire, document analysis and observation checklist. Similarly, methods that enable formative evaluation of only people from the study population and were eligible to participate in the research were used in order to describe some attribute of the target population members as was the case with teachers' and students' attitudes; management support; resources and adequacy of facilities; and competency of teachers in this study. This lowered the costs in time and energy for data collection, processing, analysis and communication, resulting in bigger the chances on actual use and impact on the implementation of the of Geography curriculum Akker (1999).

#### **3.6.1 The Questionnaire.**

The questionnaire is a convenient tool for collecting data where there are large numbers of subjects to be handled because it facilitates easy and quick collection of

information within a short time Kothari (1990). Self-administered questionnaire were used to enable the researcher to get the full range of reasons from the respondents' choices. The questionnaire was used to collect information from Form three students and teachers of Geography, Heads of department, Principals and the DQASO. The questionnaires comprised of closed-ended and open-ended items. For closed-ended items, respondents were expected to choose responses from a list of possible responses. This is supported by Dalen (1979) that closed-ended items are easy to administer to large numbers, help to keep respondents' mind riveted on the subject and facilitate the process of tabulation and analysis. According to (Warwick and Lininger, 1975) closed-ended items limit the responses to the provided choices. Due to this shortcoming, an allowance was made for open-ended items as they permit the respondent to answer freely in their own words and frame of reference. For effective data collection, the questionnaires were grouped based on the set research objectives and questions as follows: background information; attitude of students and teachers; management support; availability of resources and facilities and teacher competence.

### **3.6.2 Questionnaire for Form Three Geography Students.**

The student questionnaire was divided into two parts. Part one sought information regarding students' demographic data. Part two contained open-ended and closed ended items which sought information about student's attitude towards the Geography curriculum, support provided by educational managers, availability of teaching



resources and facilities and the teacher competence in implementation of the curriculum. This questionnaire is presented in this report as appendix 'A'.

### **3.6.3 Questionnaire for teachers of Geography.**

The teacher's questionnaire was divided into two parts. Part one sought demographic information. Part two contained closed-ended and open-ended items seeking to evaluate information about factors influencing the implementation of the Form Three Geography curriculum with reference to: attitude of teachers towards the Form Three geography curriculum, professional and technical advice provided by education managers, availability and adequacy of resources and facilities and teacher competence in implementation of the curriculum. Information on students and teachers attitudes towards Geography was obtained by use of a Likert-type of scale containing 5 response alternatives. The teachers' questionnaire is presented as appendix 'B'.

### **3.6.4 Questionnaire for Principals and HODs.**

The questionnaire for the Principal and HODs sought information on their characteristics, their supervisory role in curriculum implementation in the selected schools. The questionnaire had closed and open ended questions. The questions were organized basing on the objectives of the study as indicated in chapter one. This instrument is indicated as Appendix "C" of this report.

### **3.6.5 Questionnaire for the District Quality Assurance and Standards.**

The items in the questionnaire for DQASO sought information on characteristics, his/her role in curriculum development, as organizer of in-service courses and evaluator of the curriculum in the district. This instrument is indicated as Appendix "D" in this research report.

### **3.6.6 Document Analysis.**

A guide for document analysis was prepared to help in deriving data concerning supervision of the implementation of the Form Three Geography curriculum in the sampled secondary schools. The following documents were analyzed to establish the extent to which the Form Three Geography curriculum was clear to the teachers of Geography and their competence: the KICD Geography syllabus book, the recommended class textbooks, teachers guide books, wall maps, schemes of work, lesson plans, records of work books, progress reports, lesson notes, and photographs. Library inventories were checked to establish the availability of resources and materials for teaching and learning of Geography and to establish the number and frequency of use of the geography textbooks and reference books. Inspection reports were also reviewed both in the selected schools and at the DQASO office to determine the factors that influenced the implementation of the Form Three Geography curriculum and the technical and professional advice given to the teachers to solve the problems they faced. The checklist is presented in appendix 'E'.

### **3.6.7 Observation Checklist.**

For the purpose of this study, a checklist was used to collect data on the availability of resources and facilities for effective implementation of the Form Three Geography curriculum in the selected schools. Direct observation technique was suitable for such a study as one is able to record what he or she observes during data collection Oso and Onen, (2005). Areas that were observed included the condition of physical facilities such as the library, classrooms, desks, Geography rooms, and a weather station that were recorded. In addition, learning resources such as textbooks, wall maps, television, radios, computers and Geography specimens were observed. The information generated from this checklist together with the information collected from the

questionnaires and document analysis was used in discussion of the researcher's findings, in drawing of conclusions and recommendations for the study. Observation checklist is presented in appendix 'F'.

### **3.7 Pilot Study.**

Before the instruments were used for collecting data, a pilot study was conducted in one of the secondary schools in Trans Nzoia District. Through the pilot study, it was possible to determine whether the questionnaires would provide the data required in the study. In the pilot study, the questionnaires were administered to Form three geography students and the Geography teacher. From this pilot study, the researcher learnt that the instructions on how to complete some of the items in the questionnaires were unclear to most of the students and the teachers. These instructions were simplified and clarified. Ten students and one teacher of geography participated in the study.

#### **3.7.1 Validity.**

Validity of a research instrument is the accuracy and meaningfulness of inferences based on the research results Peter, (1994). For the given research, validity was determined using content validity whereby components of the questionnaire, documents and checklist were checked to ensure clarity of words and the accuracy of the statements in relation to the specific research questions. Akker (1999), Validity refers to the extent that the design of the intervention is based on state-of-the-art knowledge (content validity) and that the various components of the intervention are consistently linked to each other (construct validity) According to Arun (1986), experts should determine validity of research instruments. For clarification, the developed instruments were given to the supervisors in the department of curriculum instruction and educational media, Moi University to study them and determine their

validity. Their recommendations were used in modification of the instruments to improve on validity. For the researcher to modify the instruments and make them even relevant to the study, a reconnaissance, suggestions and advice offered by students and teachers were also used.

### 3.7.2 Reliability.

According to Mulusa (1990), an instrument is reliable when it yields consistent results over time. Test re-test method was used in Trans-Nzoia district to enable the researcher to check whether the questionnaires elicited similar responses by the respondents. The research questionnaires were administered to one secondary school teacher of geography and Form Three Geography students and the responses were scored. Two weeks later, the same questionnaire was administered to the same respondents. The responses were scored and Pearson's product moment correlation coefficient method was used to calculate correlation coefficient between the first and the second scores as indicated below:

$$r_{XY} = \frac{N \sum XY - \sum X \sum Y}{\sqrt{(\sum X^2 - \frac{(\sum X)^2}{N})(\sum Y^2 - \frac{(\sum Y)^2}{N})}}$$

Where:

$r$  = Pearson's

$\sum X$  = the sum of scores in the first distribution.

$\sum Y$  = the sum of scores in the second distribution.

$\sum XY$  = the sum of product of paired X and Y.

$\sum X^2$  = the sum of squares in the X distribution.

$\sum Y^2$  = the sum of squares in the Y distribution.

$\sum X^2$  = the squares of the sum of X score.

$\sum Y^2$  = the square of the sum of Y score.

N = number of paired X and Y scores.

The coefficient of correlation was found to be 0.712 for the teachers and 0.632 for the students which were considered high enough for the tools of data collection as it was within the value of 0.8 and 0.5. This is because a coefficient of 0.5 or more implies that there is a high degree of reliability of the data Mugenda and Mugenda, (1999. P. 96).

### **3.8.1 Data Collection Procedure.**

The researcher obtained a letter of introduction from Moi University, school of education that enabled her to get a research permit from the Ministry of Education, Science and Technology (see Appendix G). This was to give the study legal backing. The researcher reported to the District Commissioner (DC) and the District Education Officer (DEO), Lugari District for clearance. Permission to research in the given schools was granted. The researcher pre-visited each of the sampled schools to obtain permission from the Principals to conduct the research at agreed time and day. This was done one week in advance to prepare the participants and to explain the main purpose of the study. This was also necessary as the day the research instrument was to be distributed was to be decided upon. The researcher visited the selected schools and the DQASO in person. The researcher did document analysis and observation and administered questionnaires to the respondents the same day. This was to check on cost and time factor.

Data was collected from the Form three geography students, teachers of Geography, Principals, and Heads of humanities department from the sampled schools-using relevant research tools for each group of participants. The DQASO, Principals and HODS were given questionnaires after making an appointment with them. Open-ended and closed-ended questionnaires were distributed to the students and the teachers. The teachers used stratified random sampling to select the students who participated in the study. Each student filled the questionnaire without consulting other students in the classroom. Teachers created room and time for themselves and the learners to fill the questionnaires. The researcher collected completed questionnaires at the end of the exercise. There was 100% return of the questionnaire as the researcher administered the instruments in person to the students, teachers, and principals with the assistance of the HODS.

### **3.8.2 Ethical considerations.**

The researcher had an introductory letter from Moi University, School of education explaining to the respondents that the research was for academic purposes only. The respondent's consent was first sought to ensure voluntary participation in the study. All respondents were assured of anonymity and confidentiality in all the information given since no respondent was allowed to write his or her name on the questionnaires and the researcher assured them that information given was not to be disclosed to anybody other than the researcher alone.

### **3.9 Data Analysis.**

Data obtained from the questionnaires, documents and observation checklist was coded, tabulated, and processed by the use of the Statistical Package for Social Sciences (SPSS) software. The measurement variables represented a measure of the extent of the implementation of the Form three geography Curriculum, relative to the

objectives of the study. For the purpose of analysis where the respondents were expected to choose either 'yes' or 'no' as in question 7, 8a ,and 9 in the teachers questionnaire, the number of those choosing a particular response was worked out of the total number of respondents (20 in case of teachers) and multiplied by 100. Where more than two choices were provided, a table was drawn to show the distribution of the respondents among the choices provided (Very often, often, rarely, never) and the above technique was used to calculate the %. If the % in any response was found to be below 50%, then it was considered inadequate. In case of question 3 and 6 in the students' and teachers' questionnaires respectively, the responses were on a Likert type of scale. For purpose of data analysis the five categories of SA, A, U, D, SD, were awarded points as follows:

Strongly Agree----- (SA) 5 Points

Agree ----- (A) 4 Points

Undecided----- (U) 3 Points

Disagree----- (D) 2 Points

Strongly Disagree ----- (SD) 1 Point

The above scale was used for positive statements only. The % of those who proposed SA, A, U, D ,SD was calculated by adding the scores in each category , then divided by the number of observations in each group and expressed as a %. The same technique was employed to calculate the % of those who disagreed by use of the sum of scores of SD, D, U, A, SA. For negative statements, SD, was awarded 5 points, D, was awarded 4 points, U, was awarded 3 points, A, was awarded 2 points, SA was awarded 1 point. The technique applied in calculating positive statements was used in

calculation of negative statements. Questions 5, 11d, 12a and 12b in the students' questionnaire and question 8b, 12, 13 and 21 in the teachers' questionnaire were analyzed by descriptive statistics and qualitative description.

Descriptive data was used to analyze the performance, improvement and challenges of Geography curriculum. It determines whether or not the Geography curriculum was effective in achieving its stated goals, how efficient and effective the program was, and what changes are required to improve the program's effectiveness. The purpose was to collect data that would facilitate decision making on improving Mugenda and Mugenda (1999) the factors influencing implementation of Form Three Geography Curriculum in Lugari district.



## CHAPTER FOUR

### 4.0 DATA PRESENTATION, ANALYSIS, AND DISCUSSION.

#### 4.1 Introduction.

This chapter presents data analysis and interprets data collected from the respondents by means of questionnaires, observation checklists and document analysis. Data was analyzed by using the statistical package for social sciences (SPSS) soft ware and presented in frequency and percentages in table form. Other related data is analyzed by descriptive statistics.

The purpose of this study was to evaluate factors influencing implementation of Form Three Geography curriculum in secondary schools in Lugari District. The study sample size was 411 participants. They included one (1) DQASO, twenty (20) principals, twenty (20) teachers of geography, twenty (20) heads of humanities department and three hundred and fifty (350) Form Three Geography students sampled from 20 schools. The study sought to answer the main research question: What levels are curriculum implementation factors in implementation of geography curriculum in Lugari District?

**The following research questions were answered in this chapter:**

1. What are the attitudes of the students and teachers towards the secondary school Geography curriculum?
2. What are the levels of involvement of the educational managers in Geography innovations in Form Three in Lugari district?
3. What is the extent of availability and use of Geography resources and facilities in secondary schools in Lugari district?

4. What are the levels of teacher competence in implementation of the geography curriculum in Lugari district?

#### **4.2 Attitude of Teachers and Students toward the Form three Geography curriculum.**

In chapter two, P. 38, it has been emphasized that a positive attitude is essential in education as it facilitates effective curriculum implementation, while a negative attitude leads to poor performance. This study sought to establish the kind of attitudes held by teachers and students towards the Form Three geography Curriculum at secondary school level. Students and teachers were asked to respond to statements that could indicate their attitude towards the Form Three geography curriculum basing on a Likert five point scale. For the purpose of data analysis, the five categories of S.A, A, U, D and SD were collapsed into three categories as A, U and D. Their responses were as represented in Tables 4.1.1.and 4.1.2 respectively.

**Table 4.1.1 Students Attitude towards the Form Three Geography Curriculum**

N=350

<b>Statement about the Form Three Geography curriculum</b>	<b>Type of response</b>		
	Agree F (%)	Undecided F (%)	Disagree F (%)
I enjoy learning Geography	261(75)	50(14)	39(11)
I chose to study Geography without the teacher's influence	265(76)	55(16)	30(8)
Geography is my best subject	210(60)	20(6)	120(34)
There are enough Geography textbooks	265(76)	25(7)	60(17)
Geography syllabus is broad	220(63)	29(8)	101(29)
Geography syllabus is covered on time	70(20)	40(11)	240(69)
I like the way Geography tests are set by the teacher	200(57)	60 (17)	90(26)
Geography should be made a compulsory subject at secondary school level	150(43)	45(13)	155(44)

Table 4.1.1 shows that the students had a positive attitude towards Geography as a subject. Based on the type of response made, at least 60 % of the students had a positive attitude towards Geography as a subject except on the issue of Geography syllabus being covered on time (20%) and geography being made a compulsory subject at secondary school level (43%) and 11% who were undecided. This implied that students had a positive orientation towards the Form Three Geography curriculum though they seemed not to be aware to the following facts: (i) that the teachers in schools were skeptical about the scope of the Geography syllabus and the time stipulated for its complete coverage. (ii) The set objectives were unrealistic and not achievable within given time and resources available (iii) The Geography syllabus was overloaded in terms of content with learners not mastering it well and (iv) The teachers have been under pressure to teach during weekends and vocations to cover the syllabus before students sit for KCSE examinations. This clearly showed that the curriculum was wide hence needed review and rationalization (KIE, 1999).

The responses by students on whether Geography should be made a compulsory subject indicate that they may not have known the need to make the subject compulsory. This particular response had the highest % (13%) of undecided students amongst all the responses. Through questionnaires, students indicated that they enjoyed learning the subject and they would not mind if it was made compulsory though they sometimes experienced difficulties due to shortage of teachers and the subject was challenging especially in practical areas that required more time and great attention. Table 4.1.2 summarizes the frequencies and percentages of subject teachers responses to statements that could show their attitude towards the geography curriculum.



**Table 4.1.2 Teachers' Attitude towards the Form Three Geography Curriculum**

N=20

Statement about Form Fhree Geography curriculum	Type of response					
	Agree		Undecided		Disagree	
	F	%	F	%	F	%
A) I Enjoy teaching geography	10	50	04	20	06	30
B) In-service courses have improved the teaching of geography	04	20	02	10	14	70
C) Geography syllabus is covered adequately	08	40	03	15	09	45
D) Geography content can be managed within the allocated time.	05	25	02	10	13	65
E) Teaching methods used in geography are effective	15	75	01	05	04	20
F) Some topics of geography are too scientific	11	55	03	15	06	30

Data in Table 4.1.2 indicates that a significant number of teachers, 10(50%) had a positive attitude towards the Form Three Geography curriculum as they enjoyed teaching it, while 6(30%) disagreed with the statement. From the heads of department,

it was expressed that teachers disliked the arrangement of some topics for given classes such as weather, statistics and rocks for Form one and climatology for the Form Two as it posed a challenge to most of the learners. Asked whether the in-service courses improved implementation in geography, a few teachers, 04 (20%) agreed that they did so while 14 (70%) disagreed as they expressed the fact that in-service courses were rarely organized for teachers. From the principals it was made clear that to attend any in-service course a teacher was to pay directly from her/his own pocket. This had made teachers to keep off from the program, as it appeared expensive to afford. On the question of syllabus coverage, a significant number, 08(40%) of teachers agreed that they covered the syllabus adequately while 03(15%) were undecided and 09(45%) disagreed. Though Geography has been allocated five (5) lessons on the timetable from the initial 4, teachers expressed need for more time for the practical lessons. On the question of content coverage, a few teachers, 5 (25%) agreed that they covered the geography content on time while a majority, 13 (65%) were uncomfortable. This was made clear through questionnaire that most of the teachers were not comfortable as the syllabus appeared wide and they were forced to create extra time to cover it.

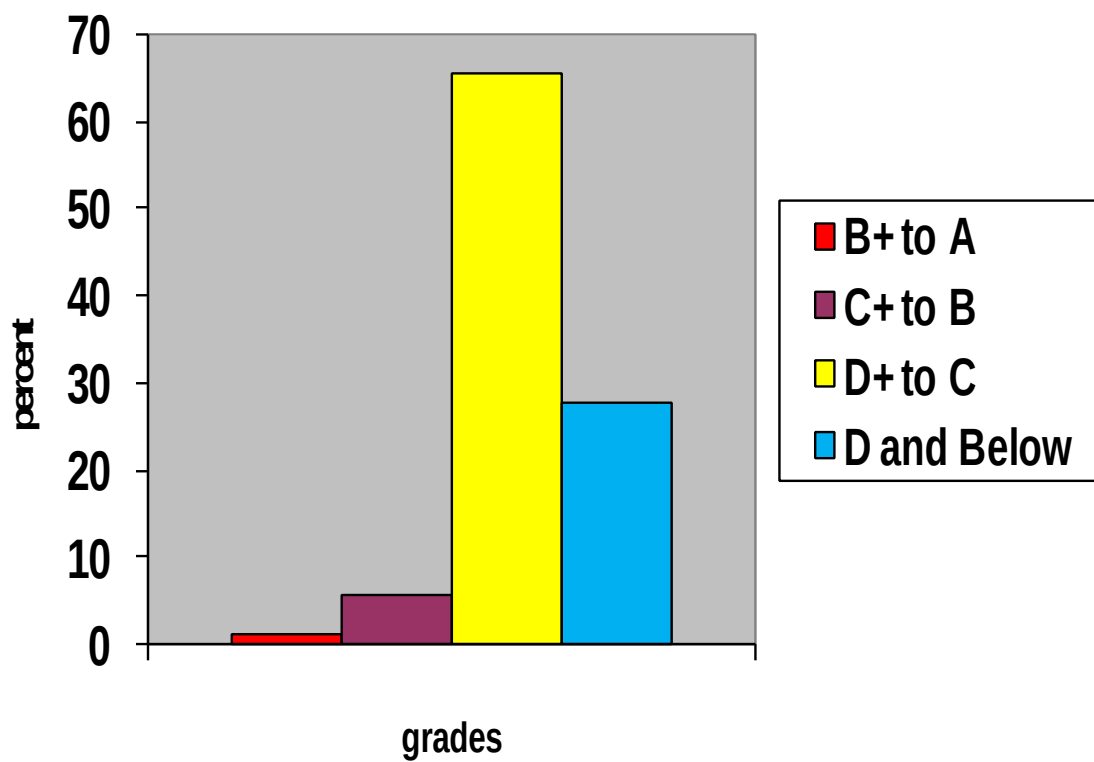
When asked to comment on methods applied in teaching, 15(75%) teachers agreed that methods applied in implementation of the innovation were sufficient though from the HODs it was made clear that most of the teachers failed to deliver given content as they used the lecture method instead of discussions and demonstrations as stipulated by KICD and more so during the practical lessons. On the issue of some topics being scientific, a significant number, 11(55%) agreed that some topics appeared too scientific and hard for learners to understand the concepts applied such as carbonation and hydrolysis under weathering which has some elements of physics and also terms emanating from biogeography such as podzolization, calcification and ferrallization

used in classification of soils discourage many teachers who are not scientifically oriented. When asked to comment on the need to revise the Geography syllabus, majority of the teachers, 16(80%) indicated that there was a serious need as some of the topics such as climatology, oceanography and desert features appeared advanced for learners at the form 3 level hence better if they were taught at college level. Also teachers indicated that a topic such as agriculture is wide in content thus better if split and covered at different levels and not only at Form Three.

Through questionnaire, 14(70%) teachers indicated that geography was an important subject in many spheres of life and principals and teachers were encouraging students to take the subject as it acted as a bridge between sciences and the humanities as it could be combined with any science or humanity in career courses. A questionnaire with the principals of the selected schools revealed that teachers of geography had a positive attitude towards the implementation of the Form Three Geography Curriculum though more time was required for effective coverage of the syllabus. Principals appreciated the fact that KNEC had added more time for geography examinations and expected more reforms to enable teachers and the students perform better in the subject. From the HODs, students had developed a positive attitude towards the subject as they had confidence in their teachers who taught with encouragement.



**Figure 4.1 Teachers' Responses on Students' Performance in Geography.**



Though positive attitudes are reflected in the student's and teacher's responses, from the data recorded in Figure 4.1 on general learner performance, majority of the teachers, (65.5%) indicated that their students scored mean grade of 'C' and below. This indicated that though the learners have a positive attitude towards the subject, their performance still remain poor. This calls for the present study as there is need to establish why a persistent negative trend in performance both at the district and at the national level yet positive inclination is reflected in both the teachers and learners towards the subject.

#### **4.3 Management Support towards the implementation of the Form Three Geography Curriculum.**

From chapter two P.40, it was observed that for effective implementation of the curriculum, teachers required support from the management such as technical advice from Quality Assurance and Standards Officer, the principals and HODs. In addition, teachers require resource materials and facilities, in-service training and clarification of the set objectives, teaching methods, content and evaluation methods. This study sought to evaluate whether Form Three teachers of geography received adequate support from the management during the implementation of the Form Three Geography Curriculum.

Teachers were asked to indicate the adequacy of various types of administration support they received as they implemented the Form Three geography Curriculum. Their responses were based on a scale of adequate or inadequate as indicated in Table 4.2. below.

**Table 4.2 Management Support for Geography Teachers**

**N=20**

Type of support	Adequate		Inadequate	
	Freq	%	Freq	%
Technical and professional advice from DQASO	04	20	16	80
Technical advice from the HODs	06	30	14	70
Technical advice from the principal	08	40	12	60
Provision of resources and facilities by administration	14	70	06	30
In-service courses organized by the ministry of education for teachers	08	40	12	60
Organization of Geography workshops and trips	04	20	16	80
Motivation of teachers	02	10	18	90

On the technical and professional advice from the DQASO, a few teachers (20%) expressed that they received advise from the DQASO while 16(80%) indicated that they received inadequate support. Through questionnaire, the DQASO expressed that he was a trained teacher but only inducted as quality assurance and standards officer. He explained that the Ministry of Education rarely organized in-service courses for

Form Three Geography teachers hence it had a negative influence on the implementation of the curriculum. Also because of shortage of funds, means of transport and shortage of work force, DQASO visited schools once in two years hence gave only little advice to teachers. From their assessment report, it was observed that schools failed to organize field trips for learners, there were no workshops for practical learning and symposium to encourage discussions. Through the inspectorate, teachers indicated that some topics were hard and wide to be implemented hence to be revised by KICD.

On the technical advice from the HODs, 6(30%) teachers indicated that they received adequate advice while majority, (70%) indicated inadequate advice. This indicated lack of commitment by the HODs in their work hence a negative influence towards the implementation of the innovation. Through questionnaire, the HODs indicated that they rarely attended in-service courses and workshops organized by KICD as principals expressed lack of money. It was made clear that the quality assurance and standards officers rarely visited Geography teachers for advice, hence a low morale in implementation of the innovation. From the teachers it was noted that principals failed to organize for trips and symposium for students as they were deemed expensive, they failed to buy the teaching and learning aids as expected and external speakers were rarely invited to talk to students on the importance of Geography. From the study, it was made clear that teachers received inadequate advise from the management in implementation of the Form Three geography curriculum hence more attention was required as the subject is of great value to the present society.

From Table 4.2, majority of teachers, 14(70%) indicated that they had adequate teaching and learning resources while 6 (30%) indicated inadequacy of the resources

and facilities hence not enough for the implementation of the curriculum. From the questionnaires, principals and HODs reported that resources and learning facilities were sourced by the schools. Principals also indicated that there was a shortage of teachers of geography as most of the schools had only one trained teacher. From the HODs, it was noted that the number of students who had enrolled for Geography at Form 3 level was low as most of the schools had a population of 30 students and below. Through HODs, it was made clear that some of the students were discouraged by colleagues or teachers not to take Geography as a subject as they believed that it was hard and wide in content this attracted the attention of the researcher who had an interest in establishing reasons for negative advice, yet positive responses are observed from both the teachers and the students towards the subject.

#### **4.4 Availability of Teaching Resources and Facilities for Implementation of the Form Three Geography Curriculum.**

For successful implementation of the Form Three Geography curriculum, adequate resources and facilities are required. Geography as a practical subject requires a geography room where the wall maps, charts, globes, computers, graphs and specimens can be kept safely for practical lessons. There is need for a library with textbooks that are necessary for the teachers and learners reference. This study sought to evaluate whether secondary schools in Lugari district had the required and adequate resources and facilities for the implementation of the Form Three Geography Curriculum. Students were asked to comment on availability of resources and facilities for the teaching and learning of Geography , and their responses are presented in Table 4.3 whereby four levels of reaction, namely: “very adequate”, “fairly adequate”, “inadequate” and “completely lacking”, are collapsed into two levels as adequate and inadequate for the purpose of analysis.



**Table 4.3 Responses on Availability and Adequacy of Resources and Facilities.**

N=20

Resource Materials	Teachers				Students			
	Available		Inadequate		Available		Inadequate	
	Freq	%	Freq	%	Freq	%	Freq	%
Wall maps	13	65	07	35	260	74	90	26
Globe	14	70	06	30	265	76	85	23
Class textbooks	16	80	04	20	300	86	50	14
Atlases	14	70	06	30	270	77	80	23
Photographs	10	50	10	50	250	71	100	29
Computers	00	00	20	100	00	00	350	100
Graphs	06	30	14	70	200	57	150	43
Charts	04	20	16	80	60	17	290	82
Topographical maps	14	70	06	30	250	71	100	29
Weather station	02	10	18	90	20	06	330	94
Geography room	02	10	18	90	20	06	330	94
Library	14	70	06	30	260	74	90	26

As indicated in Table 4.3 above, teachers were asked whether instructional resources and facilities were adequate, a significant number, (65%) of teachers indicated that wall maps were available, while (35%) perceived them to be inadequate. Similarly, (74%) students perceived the item as available. On the use of globes, fourteen (70%) teachers indicated that globes were available. Two hundred and sixty five (76%) students confirmed this and that teachers used it as a teaching aid during Geography lessons. Majority of the teachers, (80%) indicated that textbooks were available. On

the same (86%) of the learners indicated the availability of the resource. However, through questionnaire teachers indicated inadequacy of the same as the student textbook ration was at 1:4 and 1:5 respectively in most of the schools. Through document analysis, it was observed that KICD syllabus and teachers' guidebooks were available though some were outdated as they were published in the year 2000 or earlier.

From the questionnaire, 14 (70%) teachers confirmed that atlases were available, 06(30%) expressed that they were inadequate. This indicated that most schools had atlases that were used for demonstration during the geography lessons. On the use of photographs, (71%) students indicated that photographs were available. This was further expressed by teachers that photographs were available and used in implementation of the innovation

On the availability and use of computers in teaching of geography had the highest % of inadequacy as indicated by the teachers 20 (100%) and 350(100%) students respectively. This indicated that computers were not available for the teaching of the subject. From the HODs, where they existed they were used in typing only office work. On the use of graphs, 06(30%) teachers indicated that graphs were available, 14 (70%) indicated that they were inadequate while 200(57%) students expressed inadequacy of the same item. When asked to comment on the use of charts, (20%) teachers indicated that charts were available, (82%) students indicated that they were not sufficient. Through observation checklist, it was noted that only a few teachers prepared charts and graphs for demonstration during geography lessons.

On the use of a weather station, 02(10%) teachers indicated that it was available, (94%) expressed acute shortage of the facility. Through observation none of the

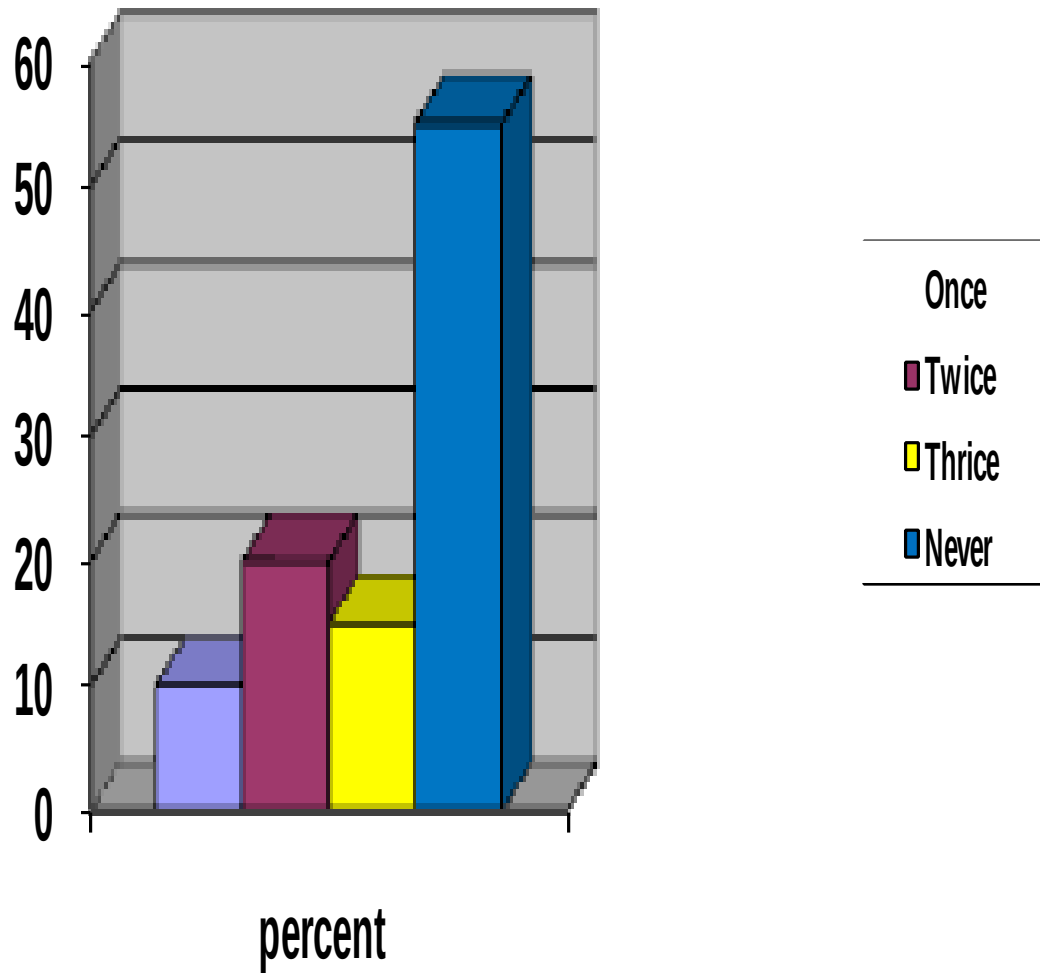


schools had a well established weather station. In a situation where it was recorded as available, only an empty Stevenson's screen existed without the required instruments. This implied that schools did not have weather stations for demonstration while teaching. Two (10%) teachers indicated that Geography rooms were available, while (90%) indicated that they were inadequate. This was further confirmed by (94%) of the learners. This revealed a shortage of geography rooms in most of the schools for the storage of teaching and learning resources and demonstration specimens. Fourteen (70%) teachers reported that library services were available, (26%) learners were of the same view. Through observation, most of the sampled schools had library services with textbooks recommended by the KICD. This indicated that schools had sufficient library services for the implementation of the Form Three Geography curriculum.

#### **4.5 Teacher's Competence in Teaching of Geography.**

From the literature review in chapter two P.46, it is apparent that the teachers' competence can influence the implementation of the geography curriculum. This study sought to investigate whether Form Three Geography teachers were competent to handle the Form three geography curriculums. Teachers were asked to indicate the number of times they had attended in-service courses as indicated in figure 4.2 below.

**Figure 4.2 Teacher Responses on in-service Courses attended by Geography Teachers**





From figure 4.2, few teachers, 2 (10%) indicated that they had trained once, 04 (20%) indicated that they had trained twice, 03 (15%) teachers had trained thrice while a majority, 11 (55%) had never trained. This indicated that most of the teachers had not trained through in-service courses for effective implementation of the geography curriculum.

**Table 4.4 Teaching Experience and Academic Qualifications of Teachers of Geography.**

N=20

Characteristic	Geography Teachers		HODs	
	Freq	(%)	Freq	(%)
Teaching experience				
1-3 years	2	10	0	0
4-6 years	4	20	2	10
7-9 years	6	30	6	30
Over 9 years	8	40	12	60
Academic qualification				
M. Ed	0	0	0	0
B. Ed	11	55	13	65
Diploma	7	35	7	35
KCSE	2	10	0	0

#### **4.6.1 Academic Qualification of Teachers.**

Teachers were asked to indicate their highest academic qualifications. From Table 4.4 all the teachers of geography had both diploma and undergraduate degree. Most of the

teachers (55%); HODs (65%) had B. Ed. The rest were diploma holders and untrained teachers of geography (10%). The schools were therefore expected to have competent teachers to handle the Form three geography Curriculum. This has not been the case as reflected in the persistent negative performance in the subject at KCSE level in the district (DEO, 2010).

#### **4.6.2 Teaching Experience of Geography Teachers.**

Data in Table 4.4 shows the number of years a teacher had taught geography. This established his/her teaching experience. The table indicates that fewer teachers (40%) were experienced while more HODs (60%) were experienced having taught for more than 9 years. Thus the less experienced teachers (60%) and HODs (40%) require exposure through in-service courses and seminars for quality services.

#### **4.6.3 Teaching Methods.**

To indicate how competent they were, teachers were asked to indicate how often they used different methods of teaching in implementation of the Form Three geography curriculum. Table: 4.5 below indicate their responses based on frequently used method, rarely and never.

**Table 4.5 Teaching Methods.**

**N=20**

<b>Teaching method</b>	<b>Frequently used</b>	<b>Rarely used</b>	<b>Never</b>

	Freq	%	Freq	%	Freq	%
Lecture	14	70	04	20	02	10
Discussion	04	20	12	60	04	20
Demonstration	04	20	10	50	06	30
Field trips	09	45	07	35	04	20
Project work	04	20	07	35	09	45

Table 4.5 above indicate that a majority, 14 (70%) teachers used lecture method of teaching, four (20%) teachers rarely used the method while two (10%) never used the method. This implied that most of the teachers used lecture method hence little interaction with the learners which may have led to a negative impact on implementation of the curriculum. From the Table, a few teachers, 04 (20%) indicated that they frequently used discussions method, 12 (60%) rarely used the method while 04 (20%) never used it at all. This indicated that only a few teachers used discussion as a method of teaching. From the Table, 04 (20%) teachers indicated that they used demonstration as a teaching method, 10 (50%) rarely used the method and 06 (30%) never used the method. This indicates that only a few teachers valued demonstration as a method of teaching. Through observation of teaching resources, it was noted that

teachers lacked teaching aids and specimens required for illustration hence avoided the method.

On the use of field trips a significant number, 09 (45.0%) of teachers expressed that they used the method in implementation of the curriculum, while (35%) teachers rarely used the method. This implied that only a few teachers used field trips to reinforce the theoretical work taught to learners in class which affected the implementation of the innovation. Four teachers (20 %) indicated that they used project work to teach Geography, 07 (35.0%) rarely used method while (45.0%) never used it. Through document analysis, it was observed that teachers lacked a record of project work prepared for the learners. From the HODs it was clear that teachers did not use project work and field trips as they required a lot of money and were time consuming.



**Table 4.6 Evaluation Methods Used by Teachers of Geography.****N=20**

<b>Methods of evaluation</b>	<b>Frequently used</b>		<b>Rarely used</b>		<b>Never used</b>	
	Freq	%	Freq	%	Freq	%
Continuous assessment tests	16	80	02	10	02	10
Examinations	14	70	04	20	02	10
Assignments	10	50	08	40	02	10
Projects	02	10	12	60	06	30
Practical assignments	05	25	12	60	03	15

From Table 4.6, a majority of teachers, 16 (80%) indicated that they frequently used continuous assessment tests to evaluate learners, 02 (10%) rarely used the method while 02 (10%) never used it. Ten (50%) teachers indicated that they used assignments, (40%) rarely used the method and (10%) never used the method. On the use of examinations, 14 (70%) teachers indicated that they used the method, while 02 (10%) never used the examinations. From the HODs, it was made clear that teachers found it better to give continuous assessment tests that they summed up at the end of the term and not one single examination at the end of the term which required a lot of time for marking. On the use of projects, 02 (10%) indicated that they used the method frequently, while a significant number, 12 (60%) rarely used the method. From the Table, 12 (60%) teachers indicated that they used practical assignments to evaluate students, 05 (25%) rarely used the method while 03 (15%) never used the method. This implied that most of the teachers avoided projects and practical work as they required a lot of time and money.

#### **4.6.4 Instructional Materials.**

A competent teacher will always prepare the correct instructional documents for the implementation of the geography curriculum. Table 4.7 indicates the instructional documents required for implementation of the Form Three Geography curriculum and teachers were requested to respond to those ones they had basing on a scale of available or not available.

From Table 4.7, 20 (100%) teachers indicated that they did not have lesson plans. This implies lack of preparation before teaching hence a negative impact on implementation of the curriculum. On the issue of schemes of work, a significant number, 16 (80%) indicated that the schemes of work were available, 04 (20%) indicated that they were

unavailable. Some of the teachers had schemes for the whole year while others for a single term hence not sure of the work to be covered.

**Table 4.7 Instructional Materials.****N=20**

Instructional materials	Available		Not available	
	Freq	%	Freq	%
Lesson plans	00	00	20	100
Schemes of work	16	80	04	20
Teaching aids	06	30	14	70
Records of work	14	70	06	30
Progress reports	18	90	02	10
Lesson notes	17	85	03	15
Syllabus book	15	75	05	25
Textbooks	16	80	04	20
Geography tapes	05	25	15	75
Topographical maps	16	80	04	20
Photographs	17	85	03	15

A few teachers, six (30%) expressed that they had teaching aids while 14(70%) indicated that they were unavailable. This showed that most teachers failed to use teaching aids while giving instructions. Fourteen (70%) teachers indicated that they had record of workbooks, while 06(30%) indicated that they were unavailable. From the observation of the records of workbook, teachers only put a tick to show work covered hence not clear on whether covered effectively or not. Most of the teachers, 18(90%) had progress reports for learners while 02(10%) reported that they were not available. Seventeen (85%) indicated that they had lesson notes while 3(15%) lacked lesson notes. From the Table 15(75%) had syllabus books while 5(25%) indicated that

they were unavailable. It showed that most of the teachers taught basing on the KICD geography syllabus. On the issue of textbooks, 16(80%) indicated that they had sufficient textbooks, 4(20%) indicated that they were not available. From the Table 05(25%) indicated that teachers had geography tapes, 15 (75%) teachers indicated that they were not available. This indicated that schools lacked video tapes that could be of help in implementation of the innovation. From the Table 16(80%) teachers had topographical maps while 4(20%) lacked the facility. On the use of photographs, 17(85%) teachers had adequate photographs, while 3(15%) indicated a shortage. This indicated that teachers had enough resources for implementation of the Form Three Geography curriculum though most of them lacked lesson plans, failed to keep progressive reports and never used tapes in teaching of Geography.

#### **4.7 Teachers Perception of Factors influencing the implementation of the Form Three Geography Curriculum.**

Table: 4.8 indicate factors influencing the implementation of the Form Three Geography curriculum. Teachers were requested to respond to the stated factors by a Likert five point scale and for the purpose of data analysis, the five categories of SA, A, U ,D and SD were summed up as agree, disagree and undecided. Their responses were recorded as frequency % as indicated in the Table 4.8 below.

**Table 4.8 Teachers Perception of Factors Influencing the implementation of Form ttt Three\_Geography Curriculum.**

N=20

Factors	Teachers Response					
	Agree		Disagree		Undecided	
	Freq	%	Freq	%	Freq	%
Teachers negative attitude	03	15	15	75	02	10
Students negative attitude	05	25	14	70	01	05
Lack of management support	10	50	07	35	03	15
Shortage of teaching resources and facilities	03	15	16	80	01	05
Wide syllabus	14	70	04	20	02	10
Shortage of Geography_ teachers	14	70	06	30	00	00
Inadequate in service courses	16	80	03	15	1	05

As observed from Table 4.8, 03(15%) teachers agreed that teachers' negative attitude influenced the implementation of the Form Three Geography curriculum, while 15(75%) disagreed and 02(10%) were undecided. Fourteen (70%) agreed that wide syllabus affected implementation of Form Three Geography curriculum, 04(20%) teachers disagreed as they claimed they covered the syllabus on time, while 02(10%) were undecided. Five (25.0%) of teachers agreed that students performed poorly in the subject because of negative attitude, 14(70%) disagreed while (05%) were undecided.

On the issue of management support a significant number, 10(50%) agreed that management support was important in curriculum implementation while 7(35%) disagreed. From the Table, 14(70%) teachers indicated that shortage of teachers affected implementation of the curriculum. From the principals it was made clear that most of the schools had only one TSC teacher of Geography and at least one employed by the BOG hence shortage of teachers. On the issue of inadequate in- service courses for teachers, 16(80%) agreed that it affected implementation, while 03(15%) disagreed, and 1(05%) were undecided. This indicated that teachers rarely attended seminars or in service courses which could enhance the implementation of the curriculum.

#### **4.8.0 Discussion of research Findings.**

This section provides a discussion of the research findings. The findings are discussed under the following sub-headings:

- i) The attitude of teachers and students towards the Form Three Geography curriculum.
- ii) The management support towards the implementation of the innovation.
- iii) The adequacy of learning resources and facilities.
- iv) Teachers' competence in implementation of the Form Three Geography curriculum.

#### **4.8.1 Attitudes held by Form Three Geography Teachers and Students towards the Form Three Geography Curriculum.**

The study sought to find out the attitudes held by teachers and students towards the Form Three Geography Curriculum. From data analysis, it was noted that most

teachers and students had a positive orientation towards the geography subject. The Form Three students (75%) had a liking for the subject and voluntarily chose to study it as they believed it acted as a bridge between the sciences and the humanities hence it could lead to a better career. It was noted that teachers also acted as role models and were responsible for the formulation of a positive attitude towards the curriculum.

Peter (1977) says that in-service education, availability of resource materials and facilities help teachers in developing a positive attitude towards an innovation. Teachers indicated that they had attended at least one in- service course and this could have helped them to improve their attitude towards the geography Curriculum. Ogoma (1987) also conducted a study on pupils' attitude and achievement in mathematics in Nairobi schools and reported that attitude affect implementation and implementation had an impact on the learners' attitude.

Other researchers such as Aiken et al. (1976) and Fennema (1990) through their studies noted that students with positive attitude towards learning and subsequent implementation in mathematics performed better than students with a negative attitude towards the subject. Though a positive attitude is noted in this study, the kind of attitude is not a hundred % as it cannot result in successful implementation of the curriculum. Other essential factors must be sufficient to ensure that the desired results are achieved. The findings in the research show that implementation of Geography in secondary schools in Lugari district is below average as most of the students scored a mean grade of 'c' plain and below (DEO, 2010). Hence, need for the present study to establish the discrepancy between the positive attitude and the negative implementation in the subject.



#### **4.8.2 Provision of Management Support to Geography Teachers.**

The research sought to establish the level of support educational managers accorded the Form Three Geography teachers. The managers included the principals, HODs and the DQASO. From the research, it was noted that teachers received insufficient support from the education managers. Through document analysis, it was established that most of the support was received from the principals through provision of resources and facilities. The principals sponsored teachers for in-service courses and seminars whenever they were organized, though lamented that they were expensive. Through questionnaires, it was observed that, principals and HODs only advised teachers during staff meetings or departmental meetings held once in a term. Through the study, some of the principals indicated that they had never been visited by the DQASO for the last five years. This indicates lack of close contact between schools, teachers and DQASO hence ineffective implementation of the curriculum.

According to Sifuna and Kiame (2005), internal and external supervision of teachers has the role of improving the quality of teaching. Education managers are supposed to clarify curriculum areas where there is doubt, provide technical advice, and provide basic resources and facilities, organize and co-ordinate in-service training programs for the teachers. Through the questionnaire, the DQASO expressed that the Ministry of Education rarely organized in-service courses for teachers of Geography due to shortage of funds. He further expressed that shortage of personnel, means of transport and funds for effective inspection of schools greatly hampered successful implementation of the curriculum. It was made clear that the officers visited teachers only once in two years or only communicated through circulars from the Ministry of Education. This meant limited interaction between the Ministry of Education and the teachers hence ineffective implementation of the innovation.

From the study, the DQASO did not offer technical advice to the teachers of Geography but only gave general advice related to the teaching as they were not specialists in the subject. The officers lacked supervisory skills required in implementation of the curriculum as most of them were picked directly from the classroom to take up the job. This professional deficiency could be addressed through in-service courses for education managers.

This was a clear indication that no serious in-service courses were organized for Form Three Geography teachers to foster the implementation of the Geography curriculum. It was clear that the HODs, the Principals and the DQASOs were unable to offer technical advice to the teachers as anticipated hence, minimal implementation of the innovation.

#### **4.8.3 Availability of Teaching Resources and Facilities.**

This study sought to investigate the availability and adequacy of instructional resources and facilities required for the implementation of the Form Three Geography curriculum. Through questionnaires, observation checklists and document analysis, it was observed that the selected schools had insufficient resource materials and facilities in both quality and quantity for the effective implementation of the curriculum though some schools indicated adequacy in some areas.

From the research, it was observed that most schools (94%) lacked Geography rooms and yet those that existed were like neglected as they had no teaching aids, no study specimens nor project work set for the learners. Though reported as adequate by most of the respondents, through questioners the HODs, expressed that the ratio of textbooks to students ranged between 1:4 and 1:5 hence inadequate for learners especially in the day schools as they were to be shared in their homework assignments.

From the study, due to lack of computers and weather stations, teachers resorted to teaching the subject theoretically as they assumed the practical areas. This demoralized the performance of the teacher and the learner hence had a negative impact on the implementation processes.

Through the questionnaires, principals confirmed that there was a shortage of teachers of Geography in most of the schools. The few who were available (55%) were overloaded, overworked and ended up thinly covering the subject content or failed to cover the syllabus ultimately. This curtailed the effective implementation of the Form Three Geography curriculum as most the students got discouraged which in the end led to poor performance. Shiundu and Omulando (1992), Oketch and Ashiachi (1992) concur with Wafula (1990) that no curriculum can effectively be implemented without adequate teaching resources and facilities. Bishop (1985) expressed that there must be ready and continuous supply of resource materials and facilities during the implementation of the curriculum innovation. Kombo and Delno (2006) posit that “schools with adequate class textbooks achieved higher than those without adequate class texts”.

From the findings, inadequate resource materials and facilities was one of the factors which led to ineffective implementation of the Form Three Geography curriculum in selected secondary schools in the district. Thus for successful implementation of the Geography curriculum, the required resources and facilities are to be availed both in quality and quantity.

#### **4.8.4 Teacher Competence.**

From the study, it was found that most of the teachers (55%) were holders of bachelor of education degree and had varied years of experience as indicated in Table 4.4.

Findings revealed that some teachers were diploma holders (35%) and therefore had good grounding knowledge in pedagogy to handle the secondary school Geography curriculum. However it was noted that a few teachers were untrained (10%) therefore need for pre-service and in-service training for better implementation.

From document analysis, it was noted that due to a shortage of teachers of Geography schemes of work were prepared on termly basis contrary to the yearly basis recommended by the Form Three Geography curriculum developers at the KICD. From Table 4.7, 70% of the teachers had records of workbooks hence easier to monitor the progress of curriculum implementation. Both teachers and HODs kept students' progress records for reference purposes that in turn helped in remedial teaching of the weaker students.

Analysis of teacher's records revealed that (90%) Form Three teachers of Geography rarely or never used project work or field trips to teach and assess learners, as they were termed as expensive. This affected the implementation of the Curriculum as practical areas were not considered during given lessons. According to Shiundu and Omulando (1992), competent teachers need to constantly evaluate the implementation process. As implementers of the curriculum, teachers need to be skilled and knowledgeable. The need for a teacher's competence is because no matter how well the curriculum is planned or prepared, its final test rests in its applicability in the classroom. Thus, the teachers' efficiency and effectiveness in implementation of a curriculum depends on both their academic, professional qualifications and their experience as teachers.

## CHAPTER FIVE

### 5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS.

#### 5.1 Summary.

This chapter discusses the summary of the study. The chapter is divided into four sections: the first section gives a summary of the research findings, the second and third sections present conclusion and recommendations based on data analysis done in chapter four. The chapter ends with suggestions for further research.

The purpose of the study was to evaluate the factors influencing implementation of Form Three Geography curriculum in selected secondary schools in Lugari district. The major research question was: What levels are curriculum implementation factors in implementation of secondary school geography curriculum in Lugari district? The need to undertake this study arose from the fact that performance in the subject has been on the declining trend for the past five years and also such a study has never been done in district. The study involved 20 secondary schools, 350 Form Three Geography students. Others included were 20 Form Three teachers of Geography, 20 HODs, 20 Principals and 1 DQASO. Data was collected by using questionnaires, document analysis and observation check lists. Collected data was analyzed by special program for social sciences and tabulated into frequencies and percentages.

#### **The study was guided by the following specific objectives:**

1. To find out the attitude of teachers and students towards the Geography curriculum.
2. To determine the levels of involvement of the educational managers in Geography innovations in Form Three in Lugari district.

3. To establish the extent of availability and use of Geography resources and facilities in implementation of the innovation.

4. To assess the levels of teacher competence in implementation of the Geography curriculum in Lugari district.

### **5.2 Conclusions.**

Most of the students (75%) had a liking for the subject and voluntarily chose to study it, as they believed it acted as a bridge between the sciences and the humanities. It was notable that over 50% of the teachers of geography had a positive orientation towards the subject hence reinforcement to the learners' positive attitude. Though a positive attitude is noted in this study, performance has remained low in the subject with most of the students scoring a mean grade of 'C' plain and below (DEO, 2010). Therefore an indicator of ineffective curriculum implementation in the district.

Teachers received inadequate support (80%) from the managers who included the Principals, HODs and the DQASO. Occasionally principals provided resources and facilities and sponsored teachers for in-service courses whenever funds were available. Principals and HODs advised teachers only during staff or departmental meetings held once or twice in a term. Hence inadequate contact between the management and the teachers. In a nutshell teachers of geography were half baked as they never interacted with KNEC and KICD on the setting and evaluation of national examinations and on the design and implementation of the curriculum respectively.

Schools (70%) indicated shortage of resources and facilities. An acute shortage was noted in Geography rooms (94%) and where they existed they lacked study specimens for demonstration and no project work was set for the learner. The ratio of textbooks to students was comparatively low ranging between 1:4 and 1:5 hence inadequate for

learners especially in the day schools as they were to be shared in their homework assignments. From the study, there was lack of computers and weather stations that made teachers resort to teaching the subject theoretically. This demoralized the teaching and learning of the subject hence having a negative impact on the implementation process. From the study findings, there was a shortage of teachers of geography and the few who were available (55%) were overloaded, overworked and ended up thinly covering the wide syllabus.

Most of the teachers (90%) were professionally qualified and with varied years of experience in teaching as indicated in Table 4.4 therefore had good grounding knowledge in pedagogy to handle the secondary school Form Three Geography curriculum. A few teachers (10%) were untrained in the subject area. Schemes of work were prepared on termly basis contrary to the yearly basis recommended by the Form Three Geography curriculum developers at KICD, 70% of the teachers had records of work books and this made it easier to monitor the progress of curriculum implementation. Teachers of Geography hardly used discussion groups, project work and field trips in implementation of the innovation. Lecture method was used in teaching both theory and practical work.

Emanating from the findings and conclusions of this study, it can be inferred that the implementation of the Form Three Geography curriculum in Lugari district was not as anticipated by the KICD. Therefore, more need to be done to establish areas of deficiencies so as to elevate implementation of the innovation.

### **5.3 Recommendations.**

From the findings and the conclusions of the study, the following recommendations were made:

1. KICD should employ a rational approach to teacher representation in course and subject panels at KICD. This would ensure that more teachers are involved in the curriculum development process and thus own the program for effective implementation.
2. Greater emphasis should be laid on gathering information from Form Three teachers of Geography by the Directorate of Quality Assurance and Standards while encouraging teachers to carry out individual researches and disseminating reports to the relevant authority.
3. The Ministry of Education should recruit and train more Quality Assurance and Standards officers to man the increasing number of schools and teachers for better implementation of the curriculum.
4. The Ministry of Education plus non-governmental organizations should assist schools in sourcing for teaching and learning resources and facilities for the effective implementation of the curriculum.
5. Local subject panels should be established or strengthened to act as a link between teachers, KNEC and the KICD on matters of curriculum development.
6. The Ministry of Education should organize in- service courses and seminars especially at Sub-County levels to ensure that teachers attend in large numbers to update them on curriculum changes in the subject.
7. The Ministry of Education should recruit and train more teachers as per the demands of the subject as it was observed that most the schools had a single trained teacher of Geography yet the syllabus was wide.



8. It is further recommended that teachers should be sensitized on the importance of teamwork, project work, field trips and discussion groups to foster the implementation of the innovation.

9. The management should introduce clinical supervision at school level to enhance curriculum implementation.

#### **5.4 Suggestion for Further Research.**

**The study suggests the following areas for further research:**

1. A similar study can be conducted in other Districts that may not have similar conditions with Lugari district for comparative purposes.

2. A study to establish the appropriateness of geography course books in relation to the geography syllabus.

3. A research can be done to identify reasons for low enrolment in Geography as a subject.

4. A study on low performance in geography in spite of positive attitude by the teachers and learners.

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## APPENDICES

### Appendix I: Researcher's Introductory Letter.

Dear student,



I am a master of philosophy student at Moi University, Eldoret. I'm carrying out a study on the evaluation of the factors influencing implementation of Form Three Geography curriculum in Lugari district. You are among the many that have been selected to participate in the research study.

Your co-operation in completing the attached questionnaire will be highly appreciated.

Thanks in advance for your co-operation.

Janet M. Amunze.

## **APPENDIX A: QUESTIONNAIRE FOR STUDENTS**

### **Instructions**

This is not an examination. It is an educational study carried out regarding teaching and learning of geography in secondary schools in Lugari district. Your school has been selected to participate in the study. Information obtained will be confidential and be used only for the study. Your co-operation will be appreciated. Respond to each

item by putting a tick (✓) in the boxes and briefly write in the spaces provided appropriately:

### **SECTION I**

(A)Background Information

1. Indicate your gender

Male

Female

2) What is your age?

10-15 years  16- 21 years  22 and

### **SECTION II**

(a) Students Attitude towards the Form Three Geography Curriculum.

(3) For the statement below about learning geography give five possible responses: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD). Put a tick to the response that closely relates to your opinion.

	Statement	SA	A	U	D	SD
A	I enjoy learning geography					
B	I chose to study geography without the teachers' influence.					
C	Geography is my best subject.					

D	There are enough geography textbooks					
E	Geography syllabus is broad					
F	Geography syllabus is covered on time					
G	I like the way geography tests are set by the teacher.					
H	Geography should be made a compulsory subject at secondary school level.					

### SECTION III

(b) Availability of Teaching and Learning Resources and Facilities. (Observation checklist)

(4) Below is a list of materials needed in the teaching and learning of geography. Put a tick (✓) to show whether or not they are available in your school.

	Resources and facilities	Available	Not available
1	Wall maps		
2	Globe		
3	Class textbooks		
4	Atlases		
5	Photographs		
6	Computers		
7	Graphs		

8	Charts		
9	Topographical maps		
10	Weather station		
11	Geography room		
12	Library		

(5) List the textbooks used in learning geography in your school.

Title	Author
A.	
B.	
C.	
D.	

(6) Indicate by ticking in the appropriate column on the method frequently used by the teacher to evaluate in your performance.

	Method	Very often	Often	Rarely	Never
1	Continuous assessment test				
2	Examinations				
3	Assignments				
4	Projects				
5	Practical assignments				

(7) How often do you visit the library?

Once in a week        once in a term        Never

Once in a year       once in a month

(8) The geography department frequently organizes field trips workshops and practical lessons for the student

- a) Always       c) Rarely
- b) When need arises       d) Never

9) Does your school participate in internal and external symposiums?

- (a) Always       (b) When need arise
- (c) Rarely       (d) Never

10) Does your school invite geography guest speakers?

- (a) Always       (b) Sometimes
- (c) Rarely       (d) Never

11) (i) how do you compare the learning of geography in relation to other subjects?

- (a) Very easy       (b) Very difficulty       (c) Fairly difficult

ii) Give reasons to support your choice above

12) a) are you satisfied with your performance in geography?.....

b) if not what do you think can be done to assist you in the subject?

**Thank You**

## **APPENDIX B: QUESTIONNAIRE FOR TEACHERS OF GEOGRAPHY**

Dear Teacher,

This is an educational study being carried out on the evaluation of actors influencing implementation of Form three geography Curriculum in Lugari district. You are one of the curriculum developers chosen to participate in the study. The information obtained will be treated as confidential both during and after the study. Your co-operation and assistance will be highly appreciated.

**Instructions:** please respond by writing briefly or tick (✓) against the response that best describe your response.

### **SECTION I: BACKGROUND INFORMATION**

1) Category of your school

(a) Boys

(b) Girls

- (c) Mixed
- 2) Gender: Female  Male

3) Academic qualification

- (a) M. Degree
- (b) B. Ed. Degree
- (c) Diploma
- (d) Others

4) How long have you taught geography in secondary schools?

- (a) 1-5 years  (b) 6-10 years  (c) Over10 years

**SECTION II: (A) Attitude of Teachers towards Form Three Geography Curriculum**

**Instructions:** each of the following statements expresses an opinion which you have towards geography. You are given alternative responses depending on the extent of agreement with the feeling in each statement. The alternatives are Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (D) and Strongly Disagree (SD). Please tick the alternative that best describes the opinion.

Statement	SA	A	U	D	SD
A) I enjoy teaching geography					
B) In-service courses have improved the teaching of geography.					
C) Geography syllabus is covered adequately.					
D) Geography content can be managed within allocated time.					

E) Teaching methods used in geography are effective.					
F) Some topics of geography are too scientific					
G) There is need to revise the form three geography curriculum					
H) Geography is applicable in many spheres of life trade, industry and agriculture.					

7 (i) Do you enjoy teaching geography?

a) Yes                       b) No

ii) Are there any aspects of the form three geography curriculum that you would want rectified?

a) Yes                       b) No

ii) If yes, list down the aspect.

c) How have you solved these problems?

8) Do you persuade students to choose geography at form three?

a) Yes                       (b). No

9) Are you satisfied with the student's implementation in geography in your school?

a) Yes                       b) No

10) In your opinion, what is the future of geography in this school?.....

11) How often do you receive instructions from KIE on the evaluation of the form three geography curriculum?

(a) Often



(b) Rarely

(c) Never

12) Are you satisfied with the evaluation of the form three geography curriculum in your school?

13) Kindly suggest ways in which teaching and learning of geography can be made better.....

#### **(14). Management Support for Geography Teachers**

Below are different types of stakeholders' support that are essential to geography teachers. Put a tick (✓) to show whether they are adequate or inadequately provided by educational managers.

Types of support	Adequate	Inadequate
Technical advice form DQASO		
Technical advice from HOD		
Technical advice from principal		
Provision of resource materials and facilities		
In-service courses for teachers		
organization of geography workshops and trips for students by the administration		

15) How often do the DQASO visit your school?

(a) Once in a term

(b) Once in a year

(c) Not at all

B) Who provides the recommended teachers and students textbooks?

16) How often do you have departmental meetings?

(a) Once in a month

(b) Once in a term

(c) Once in a year

(d) Never

17) How many times have you attended in-service courses related to geography?

(a) Once

(b) Twice

(c) Thrice

(d) Never

18) How often are geography trips and workshops organized for geography students in your school?

19) How is the general implementation in geography?

(a) Mean B+ and above

(b) Mean C+ to B+

- (c) Mean D+ to C
- (d) Mean D and below

**20) Below is a list of materials and facilities needed in teaching and learning of geography. Put a tick (√) or (x) to show whether or not they are available in the school.**

Resources and Facilities		Available	Not available
	Wall maps		
2	Globe		
3	Class textbooks		
4	Atlases		
5	Photographs		
6	Computers		
7	Graphs		
8	Charts		
9	Topographical maps		
10	Weather station.		
11	geography room		
12	Library		

**21) List the textbooks used in learning geography in your school**

Title	Author
A)	
B)	
C)	
D)	
E)	

**22) The following are teaching methods of geography. Put a tick (✓) to show how often it is used.**

Method	Often	Rarely	Never
Lecture			
Discussion			
Demonstration			
Field trips			
Project work			

**23) The following are evaluation methods used by geography teachers to assess learners. Indicate by use of a tick on how frequent a given method is used**

Methods of Evaluation	Often	Rarely	Never	Often
Continuous assessment test				
Examinations				
Assignments				
Project				
Practical assignment				

**d) Factors Influencing Implementation of Geography**

24) put a tick ( ) on the box against each factor in the column to indicate the extent to which each factor influence the implementation of the form three geography curriculum.

Factors	Teachers Response			
	Great extent	Moderate	Low extent	No extent
Teachers negative attitude				
Students negative attitude				
Lack of stakeholders				

Support				
Lack of teaching resources and Facilities				
Wide syllabus				
Shortage of geography teachers				
Inadequate in-service courses				

**Thank you**

**APPENDIX C: QUESTIONNAIRE FOR PRINCIPALS AND HEADS OF DEPARTMENT**

Dear Sir/Madam,

This is an educational study being carried out on evaluation of factors influencing implementation of Form three geography curriculum in Lugari district. You are one of the curriculum developers chosen to participate in the study. The information obtained will be treated as confidential both during and after the study. Your co-operation and assistance will be highly appreciated. Kindly read the instructions before you start filling the questionnaire. Please tick (✓) in the square provided, a question should have one response.

Thank You,

Janet Amunze.

**Instructions: Fill in the blank spaces provided.**

**SECTION I: Background information**

(1) Type of school

(a) Boys

(b) Girls

(c) Mixed

(2) Your position in the school?

Principal  HOD

(3) Gender: Female  Male

(4) Academic qualifications

(a) M. Degree

(b) B. Ed degree

(c) Diploma in education

(5) For how long have you served as a principal or an HOD?

a) 1-5 years      b) 6-10 years      c) over 10 years

## SECTION II

(II) Curriculum matters.

6) a). How many form three geography teachers are there in the school?

b). do you give geography form three geography teachers guidance on the teaching of the subject?

(a) Every week                       (b) Every month

(c) Fortnightly                       (d) End term

(8) a) do geography teachers in your school attend in-service courses?

(a) Yes                       (b) No

b) If yes, how often do they attend the courses?

(a) Once per year                       (c) Rarely

(b) Once per term                       (d) Never

(9) How often do geography form three geography teachers in your school receive guidance on evaluation of form three geography curriculum from the Kenya institute of education?

(10) How often does the school organize for trips and workshops for geography students?

(a) Very often                       (b) Often



(c) Rarely  (d) Never

(11) How does the school acquire teaching and learning materials in geography?

(a) Purchase  (b) Donors  (c) Parents  (d) Improvisation

(12) a) do geography form three geography teachers use schemes of work and lesson plans to teach geography? Yes  No

b) if yes who prepares them?

(1) Schemes of work-----

(2) Lesson plans-----

c) How often do you check and sign them?

Every week  Fortnight

End term  Every month

(13) a) is geography an important subject in the secondary school curriculum?

Yes  No

b) Give reasons for your answer.....

14) How often does your school receive KIE analysis on implementation in geography?

(15) a) are you satisfied with the geography implementation in the school?

Yes  No

B). If not, what do you think can be done to have the students perform better in KCSE geography examinations?.....

**Thank you**

**APPENDIX D: QUESTIONNAIRES FOR QUALITY ASSURANCE AND  
STANDARDS OFFICER (DQASO)**

This is an educational study being carried out on the evaluation of factors influencing implementation Form three geography curriculum in Lugari district. You are one of the curriculum developers chosen to participate in the study. The information obtained will be treated as confidential both during and after the study. Your co-operation and assistance will be highly appreciated.

Thank You

Janet Amunze

**SECTION I: Background information**

1) Gender: Male  Female

2) Academic qualification

(a) M. Ed

(b) B. ED

(c) Diploma

(d) K.A.C.E

(e) K.C.E

(f) Any other (specify) \_\_\_\_\_

3) For how long have you served as a quality assurance and standard officer?

4) Were you trained as a quality assurance and standard officer? .....

5) How long have you served in your current station?.....

### **SECTION II: Curriculum matters.**

6) What role do you play in the evaluation of the form three geography curriculum?....

7) How often does your office organize in-service courses for geography teachers?

(a) Very often  (c) Rarely

(b) Often  (d) Never

8) How often do you inspect form three geography curriculum in secondary schools in your district?.....

9) a) through your supervision, which problems are the geography teachers facing as they attempt to implement form three geography curriculum?

B) If any, how do you assist them in solving these problems?



4. Do the teachers use geography KICD and KNEC syllabus and teachers guide books
5. List the titles of geography text books and indicate whether they are adequate for teaching geography.
6. Are there teaching aids in the geography room?
7. Where are the teaching and learning materials stored?
8. Any inspection materials by DQASO in the department.

**APPENDIX F: OBSERVATION CHECKLIST FOR TEACHERS OF  
GEOGRAPHY.**

1. Does the school have a geography room?
2. Is there a weather station in the school?
3. Does the school have a television, computer, wall maps and radio?
4. Are there teaching aids in the geography room?
5. Does the school have a library?


**APPENDIX G: RESEARCH PERMIT**

PAGE 2

THIS IS TO CERTIFY THAT:  
Prof./Dr./Mr./Mrs./Miss. JANET  
AMUNZE  
of (Address) MOI UNIVERSITY  
P.O. BOX 3900 ELDORET  
has been permitted to conduct research in.....  
.....Location,  
LUGARI.....District,  
WESTERN.....Province,  
on the topic A STUDY OF FACTORS  
INFLUENCING THE IMPLEMENTATION OF  
THE GEOGRAPHY CURRICULUM IN  
SECONDARY SCHOOLS IN LUGARI  
DISTRICT, KENYA.  
for a period ending 31ST DECEMBER, 20 10

PAGE 3

Research Permit No. NCST/RRI/12/1/SS/100  
Date of issue 17.03.2010  
Fee received SHS 1,000



[Signature]  
Applicant's  
Signature

[Signature]  
Secretary  
National Council for  
Science and Technology

**APPENDIX H: MAP OF LUGARI DISTRICT**

