

**ASSESSMENT OF THE IMPLEMENTATION OF SAFETY POLICY IN
PUBLIC SECONDARY SCHOOLS IN KERICHO WEST DISTRICT,
KENYA**

BY

KIPLANGAT TITUS KITUR

**A THESIS SUBMITTED TO THE SCHOOL OF EDUCATION IN
PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE
AWARD OF A MASTER OF PHILOSOPHY DEGREE IN
EDUCATIONAL PLANNING, DEPARTMENT
OF EDUCATIONAL MANAGEMENT
AND POLICY STUDIES**

MOI UNIVERSITY

AUGUST 2014

DECLARATION

This thesis is my original work and has not been presented for a degree in any other University. No part of this thesis may be reproduced without prior permission of the author and/or Moi University.

Name of the candidate

KIPLANGAT TITUS KITUR

Date.

EDU/PGES/4011/09

Declaration by the supervisors

This thesis has been submitted for examination with our approval as the appointed University supervisors

DR.Z.K. KOSGEI

Date.

Lecturer

Department of Education Management and Policy Studies

Moi University

DR.S.K.SAINA

Date

Lecturer

Department of Educational Management and Policy Studies

Moi University.

ABSTRACT

The purpose of the study was to examine implementation of safety policy in public secondary schools in Kericho West District with the view of establishing the extent to which the underlying policies have been implemented and the factors affecting the implementation process. The study was carried out in Kericho West District with 28 Public Secondary Schools. The study covered 9 schools. Stratified random sampling was used to select schools from which data was obtained. Stratified random sampling technique was chosen because the schools have varied status such as pure boys boarding, pure girls boarding, mixed boarding/day and mixed day. The elements of safety needs in Maslow theory, security, protection and freedom from chaos are relevant to the study and formed the basis of justification for this research which made recommendation on safety procedures and preparedness. The instruments of data collection were observation schedule, the Head teachers' questionnaire and the Quality Assurance Officers interview schedules. The selection of those tools was guided by the nature of data to be collected, the time available and the nature of respondents and objectives of the study. In order to test the reliability of research instruments the researcher carried out a pilot study in two schools in the neighbouring Kericho East District. The validity of the instruments was established based on the objectives of the study in order to capture the required information. The data from head teachers questionnaire and observation schedule was analyzed by use of descriptive statistics in terms of frequencies, percentages and means then presented using tables and graphs. This study established that the state of safety policy implementation in public secondary schools in Kericho West District was on overall partially implemented except for the requirement that Head teachers resides in school which is 100% implemented. Factors influencing the implementation of safety policy as cited by respondents are financial resources, regular assessment, and knowledge in safety, use of specialists, political goodwill and time frame. The study also establish that outsourcing for funds, training of personnel, creating awareness in the community, adherence to Government policy, Architectural design, Environmental design and design of assembly points as possible solutions to the challenges of implementation. The study recommends that the Ministry of Education formulates a more elaborate policy to address student's safety in Schools.

DEDICATION

This thesis is dedicated to the creator, the Almighty God who gave me the physical and mental strength to undertake and accomplish this thesis in the prescribe period of time.

TABLE OF CONTENTS

CONTENT	PAGE
DECLARATION.....	i
ABSTRACT	ii
DEDICATION	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES	xii
LIST OF FIGURES	xiii
ACKNOWLEDGMENTS	xiv
ABBREVIATIONS AND ACRONYMS	xv

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction	1
1.2 Background of the study	1
1.3 Statement of the Problem	4
1.4 Purpose of the study.....	6
1.5 Objectives of the study.....	6
1.6 Research Questions.....	6

1.7 Justification of the study	7
1.8 Significance of the study.....	7
1.9 Scope of the study.....	7
1.10 Limitation of the study	8
1.11 Assumption of the study.....	8
1.12 Theoretical framework.....	9
1.13 Conceptual framework.....	10
1.14 Chapter Summary	12
1.15 Operational definition of key terms	12

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction	13
2.2 The concept of policy implementation	13
2.3 Implementation of safety policies on the Global scene	14
2.3. 1 North and South America.....	14
2.3.2 Europe	17
2.3.3 Asia	19

2.3.4 Africa	19
2.4 Implementation of Safety Policy in Kenya	21
2.5 Community role in school safety	27
2.6 Related Studies	28
2.7 Chapter Summary	31

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction	33
3.2 Research design	33
3.3 Area of study	33
3.5 Sample and sampling procedures	34
3.6 Research instruments	34
3.6.1 Observation schedule	34
3.6.2 Head teacher Questionnaires	35
3.6.3 Quality Assurance Officers Interview Schedule	35
3.7 Reliability of research instrument.....	35
3.8 Validity of research instruments.....	36

3.9 Data Collection procedure.....	36
3.10 Ethical Issues	37
3.11 Data analysis procedures.....	37

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction	38
4.2 State of safety policy implementation in public Secondary schools	38
4.2.1 Head teacher's views on safety policy implementation.....	39
4.2.1.1 Head teachers residing in school	42
4.2.1.2 Use of experts in building and construction	42
4.2.1.3 Personnel trained in First Aid	43
4.2.1.4 First Aid kits	43
4.2.1.5 Fire drills done since 2005	44
4.2.1.6 Classrooms situated upwind from Laboratories, Kitchen and Toilets	45
4.2.1.7 Fire fighting devices.....	45
4.2.1.8 Safe source of water	46
4.2.1.9 Regular inspection of students and premises.....	46

4.2.1.10 Buildings installed with lightning arrestors.....	47
4.2.2 Observed state of safety policy implementation in Public Secondary Schools	47
4.2.2.1 Double doors in dormitories and laboratories opening outwards.....	49
4.2.2.2 Emergency exits in dormitories and laboratories	49
4.2.2.3 Safety instructions prominently displayed	50
4.2.2.4 Window grills removed in the classrooms and dormitories	50
4.2.2.5 Long sides of classrooms running East-West directions.....	51
4.2.2.6 Crowding evident in classrooms and dormitories.....	51
4.2.2.7 Adequate perimeter fence.....	52
4.2.2.8 Fire fighting equipments within reach	52
4.3 Factors influencing safety policy implementation in public secondary schools	53
4.3.1 Head teachers' views on the factors influencing safety policy implementation	53
4.3.1.1 Financial Resources	54
4.3.1.2 Regular assessment	55
4.3.1.3 Knowledge in safety policy	55
4.3.1.4 Use of specialists	56
4.3.1.5 Political goodwill.....	56

4.3.1.6 Time frame	57
4.3.2 Quality Assurance and Standards Officers (QUASO) views on factors influencing safety policy implementation	57
4.3.2.1 Availability of funds and its management.....	57
4.3.2.2 Monitoring and Evaluation.....	58
4.3.2.3 School community attitude.....	59
4.3.2.4 Timeline.....	60
4.3.2.5 Training in safety matters.....	60
4.4 Possible solutions to the challenges affecting the implementation process	62
4.4.1 Head teachers' views on the possible solutions to the challenges affecting the implementation process	62
4.4.1.1 Sourcing of funds	64
4.4.1.2 Training of personnel	64
4.4.1.3 Adherence to government policy	65
4.4.1.4 Community awareness	65
4.4.1.5 Architectural designs.....	66
4.4.1.6 Proper fencing.....	66
4.4.1.7 Environmental design.....	66

4.4.1.8 Design of Assembly point	67
4.4.2 Quality Assurance and Standards Officers views on the possible solutions to the challenges affecting the implementation process	67
4.4.2.1 Outsourcing of funds	67
4.4.2.2 Training of personnel	67
4.2.3. Community awareness	67
4.4.2.4. Adherence to government policy	68
4.4.2.5. Regular assessment	68
4.5 Discussion of findings.....	69

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction	75
5.2 Summary of findings	75
5.3 Conclusions	76
5.4 Recommendations.....	77
5.5 Suggestions for further research	78
REFERENCES.....	79

APPENDICES

APPENDIX 1: BUDGET	84
APPENDIX II: INTRODUCTORY LETTER TO THE HEADTEACHERS	85
APPENDIX III: HEAD TEACHER'S QUESTIONNAIRE.....	86
APPENDIX IV: QUALITY ASSURANCE OFFICERS; INTERVIEW SCHEDULE....	92
APPENDIX V: OBSERVATION SCHEDULE.....	95
APPENDIX VI: RESEARCH AUTHORIZATION	98
APPENDIX VII: RESEARCH PERMIT	99
APPENDIX VIII: MAP OF THE STUDY AREA; KERICHO WEST DISTRICT.....	100

LIST OF TABLES

Table 4.1: State of safety policy implementation as indicated by Head teachers.....	39
Table 4.2: Head teachers' opinion on the state of safety policy implementation.....	41
Table 4.3 Observed state of safety policy implementation in the Public Secondary Schools	48

LIST OF FIGURES

Figure 1.1 The interplay of factors in the implementation of school safety policy ...	11
Figure 4.1: Head teachers' views on the factors influencing the implementation process	53
Figure 4.2: Head teachers' views on the possible solutions to challenges affecting implementation process	63

ACKNOWLEDGMENTS

It is with the grace of God that I have been able to accomplish this study. I am greatly indebted to Moi University community especially the School of Education and the Department of Educational Management and Policy Studies. I am full of gratitude to my Supervisors Dr. Kosgei Z. and Dr. Saina S. who devoted a lot of time and patience to this thesis preparation. I am particularly very grateful for the extra ordinary advice, guidance and concern they accorded me. I also wish to convey sincere gratitude to the Head teacher Kakibei Secondary school who gave me permission out of school to write the thesis. My gratitude also goes to my colleagues in College namely Cheruiyot, Lona, Emily, Johannes, Chelal, Bwoma, Milly, Evaline, and Rose among others for their invaluable contribution. I am also full of gratitude to my wife Linner who with patience and self denial supported me in meeting the needs and demands of this study, my children Emmanuel, Charles, Fancy and Miriam who were always a source of inspiration in their support, prayers and goodwill. Finally, I wish to thank Daisy, and Chepkirui for neat typing of the thesis.

ABBREVIATIONS AND ACRONYMS

The following abbreviations have been used in this study:

CDF – Constituency Development Funds.

GHI – Geo – Hazard International.

M&E – Monitoring and Evaluation.

OECD – Organization of Economic Cooperation and Development.

PEB – Programme on Educational Buildings.

QUASO – Quality Assurance and Standards Officer.

UNESCO – United Nation Educational Scientific and Cultural Organization.

USDE – United States Department of Education.

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction

This chapter deals with the background to the study, statement of the problem, purpose and objectives of the study, Research questions, justification, significance, scope, limitations and assumption of the study, theoretical framework, conceptual framework and the definition of key terms.

1.2 Background of the study

Safety of students in school is a matter of concern to all governments in the world. All organizations and institutions of learning have safety measures put in place. Learning institutions are viewed as havens of peace for learners by many, but in the past few years there has been reported increase in the number of tragic incidences in public secondary schools in Kenya. The resultant trauma, injury loss of lives and property are attributed to failure by schools to strictly implement the safety policy, The successful enforcement of safety policy will reduce or eliminate injuries and deaths in schools, dormitory fires, road accidents, invasions, disease outbreak and other preventable disasters, (Siring,2001).

The 1991 raid by boys on the girls dormitories at St Kizito Secondary school in the then Meru District was blamed on inadequate protection of girls and poor attitude of teachers towards the security of students. The issue of school security recurred again in 1993 when armed gangsters raided Hawanga girls' secondary schools in Siaya District. The school had no permanent fence making it easier for the gangsters to enter into the school and rape students. Another factor that compromises the safety of students in school dormitory emergencies is crowding. In the 1998 Bombolulu girls' secondary school

dormitory fire tragedy where twenty seven girls died, crowding was one of the factors that contributed to the deaths. At the time of the fire the dormitory housed 145 students against the installed capacity of 100 students. The Bombululu fire tragedy was compounded by the fact that the front door to the dormitory was locked from outside and all the windows were grilled (Gicheru 1998; Oriang, 2001).

School dormitory safety can be greatly enhanced by creating emergency exits and installing fire fighting equipments. The absence of fire fighting equipments and emergency exits led to the high death during the Kyanguli secondary school fire in 2001. Sixty eight boys lost their lives in a disaster that could have been avoided by implementing building safety codes. Another safety issue that keeps recurring in schools is that of lightning strikes. The continued death of students in lightning strikes has been blamed on the failure to install lightning arrestors on school buildings. For example, on September 2004, lightning struck death four pupils of Mosobeti Primary school in Nyamira District. In 1981, eleven pupils of Biego primary school were killed by lightning strike (Nyakundi, 2004; Odalo, 2001).

Other reported cases recently in Kenya include the July 2012 cases where eleven pupils and one teacher sustained burns in Eshisanga primary school in Kakamega and the dormitory fire in Karatina Girls Secondary school. In 2013 there was other reported case of fires in Kenyan schools notably Sipilli secondary school in Laikipia where suspended students sneaked into the school through porous fence and torched a dormitory destroying property worth thousands of shillings. Following such incidences and unrests, investigation have been commonly undertaken dealing with the role of administration, the suspects and the whole setup underlying safety procedures in schools. In essence reports

of high profile strikes create an impression that there is a gap in the school safety and thus the question of whether schools have put in place adequate safety precautions.

According to Indiana Education Policy Centre (2002), school violence prevention demands that we prepare for the eventuality of violence and disruptive behavior that may occur, over reliance on suspension and expulsion is replaced by an extensive array of options that can be matched to the severity of the offence. The underlying issue on safety would be adequacy of procedures and precautions that have been taken by schools. From research studies by US Department of Education and US Department of Justice, it is clear that a combination of programs and strategies that include security checks, Education in violence or arson prevention, counseling and management of students would be ideal. Arson prevention could include installation of fire extinguishers in school laboratories, offices and other fire prone spots. It would also be expected that fire drills and first aid form part of the weekly activities and the fire equipment is checked for readiness in case of emergency.

In Kenya, an attempt has been made to make schools safe zones by the Ministry of Education by coming up with a school safety policy in 2008. The school safety policy includes: requirements that Head teachers should reside in school so that in case of emergency he/she is able to assist, other teachers where possible should also reside in school. Teachers and other school workers should be trained on emergency procedures. Firefighting equipments including: hose reels, hydrants extinguish, sprinkles and dry rinsers should be provided where there is main water supply. Fire drills should be held at least twice every term to improve preparedness. There is need to involve registered architects, quality surveyors and contractors in site planning, design, construction and

maintenance of school buildings. Dormitories should have double doors opening outwards. Emergency doors should be created in dormitories and special rooms like laboratories for easy exit during emergency. Longer sides of classrooms should run in East – West direction to avoid effects of sun rays in the morning and evening. Classrooms should be built up wind from laboratories, kitchen, playground and toilets to avoid foul smell and Emergency exits should be clearly labeled and cleared clutter, (Republic of Kenya, 2003).

Regular health inspection of premises and students should be done to ensure their safety and overcrowding in classrooms and dormitories should be avoided. Their number should not exceed the carrying capacity, boarding sanitation for girls should ensure safe and effective disposal of sanitary wear and four closets for every thirty learners. Boys boarding facilities should have five closets and urinals for every fifty students. There should also be regular cleaning and white washing of buildings. Finally, special rooms like laboratories and workshops should each have first aid kits for use during emergencies and special instructions should be prominently displayed in laboratories and workshops (Republic of Kenya, 2008). Despite the above stated guidelines public schools in Kenya are far from being safe zones since incidences of deaths are still reported in Schools quite often. This study assessed the extent to which these policy guidelines have been implemented in schools in Kericho West district.

1.3 Statement of the Problem

Safety policy guidelines in schools worldwide have been put in place but incidences of injury, death and loss of property are still reported in the schools. The United States Department of Education for instance, requires safety policies in schools to be strictly

enforced in view of threats posed by terrorism, drug related violence, use of fire arms and natural disasters. Most American public schools have zero tolerance policies on activities that are likely to compromise safety but deaths are still reported in schools (USDE, 2008). In sub-Saharan Africa, countries have policies which try to make schools safe zones but deaths and injuries in the schools are still reported (Eliseev, 2003). In Kenya the government issued a safety policy guideline in 2008 when the Ministry of Education entered into a partnership program, school safe zones with Church World Service (CWS) a program that enhance safety for learners in schools. But in June 2009 it was reported that many public secondary school had not complied with the requirements (Akali et al, 2009). In Kericho West and neighbouring districts arsons have been reported in a number of schools (Oduor and Atsiaya, 2004; Bwire and Ngaobao, 2006).

The 2007 arsons attacked at Kakibei secondary school and the August 2011 burning of two dormitories at Cheptenye High schools is notable examples in Kericho West District. Other reported cases recently in Kenya include the July 2012 cases where eleven pupils and one teacher sustained burns in Eshisanga primary school in Kakamega and the dormitory fire in Karatina Girls Secondary school. In 2013 there was other reported case of fires in Kenyan schools notably Sipilli secondary school in Laikipia where suspended students sneaked into the school through porous fence and torched a dormitory destroying property worth thousands of shillings. These incidences and many other incidences not reported here raised important questions about school disaster management, preparedness and students safety. The persistent recurrence of safety problems in public secondary schools poses urgent questions about the implementation of safety policies that demand urgent answers for similar cases to be avoided in future. This study therefore,

investigated the adequacy of preparedness, precautions and infrastructure to respond to emergencies in public secondary school in line with the safety policy guideline.

1.4 Purpose of the study

The purpose of this study was to examine implementation of safety policies in public secondary schools in Kericho west District with the view of establishing the extent to which the underlying policies have been implemented and the factors affecting the implementation process.

1.5 Objectives of the study

The study was guided by the following objectives:

- (i) To investigate the extent to which safety policies have been implemented in public secondary schools in Kericho West District.
- (ii) To examine the factors influencing the implementation of safety policies in public Secondary schools.
- (iii) To determine possible solutions to the challenges affecting the implementation process.

1.6 Research Questions

The following research questions guided the study:

- (i) What is the extent to which public Secondary schools have implemented safety policy in Kericho West District?
- (ii) Which factors influence the implementation of safety policies in public secondary schools?

- (iii) What are the possible solutions to the challenges affecting the implementation process?

1.7 Justification of the study

Despite the fact that safety policy guideline is in place, less attention has been given to the implementation. Normally, the head teachers are expected to oversee the implementation process and the allocation of resource within the school. Studies on safety policy implementation reveal that most schools are yet to fully implement the guideline. This makes schools unsafe for the learners and other facility users. The researcher found it important to undertake this study since available literature is inadequate to reveal the extent of safety policy implementation as required in order for the schools to be safe zones. This therefore justified the timely call for the assessment of the implementation of safety policy in the Public Secondary Schools in Kericho West District.

1.8 Significance of the study

The findings of this study have prescriptive as well as corrective values. They are useful to teachers, school managers and policy makers in the Ministry of Education by first; improving understanding of the factors which shape the safety policy implementation process in public secondary schools, secondly, by providing information which can contribute to the full implementation of the safety policy and thirdly, by providing information which can be used to make future safety policies.

1.9 Scope of the study

The study was carried out in Kericho West District with 28 Public Secondary Schools and it examined the implementation of school safety policy in the schools with the view

of finding out the extent to which the policy document have been implemented, the challenges influencing the implementation, and the possible solutions to the challenges. The study covered 9 Schools, and it involved 9 School head teachers, and one Quality Assurance Officer. The choice of Kericho West District was informed by the fact that little has been done in the area on safety policy implementation and reported fire cases in the schools in the districts despite the policy guideline being in place.

1.10 Limitation of the study

Given the sensitivity of the topic as may be seen by some Head teachers, they were initially not willing to respond to the questionnaire and some even did not allow the researcher to go around the school to observe the extend of implementation of the safety policies in the schools. The researcher overcame some of these challenges by assuring them of confidentiality of the information provided to him. The remoteness of some schools located in the Soin area was a problem reaching them during the study due to bad roads and limited means of transport. The researcher employed a qualified research assistant from the area who adequately sourced information required.

1.11 Assumption of the study

This study was carried out on the basis of the following assumptions.

- (i) All public secondary schools Head teachers were conversant with school safety policy
- (ii) The implementation of safety policy is mandatory to all public secondary schools.
- (iii) All public secondary schools had the capacity to implement school

safety policy

- (iv) The preconditions for the full implementations of safety policies were in place.

1.12 Theoretical framework

This study was anchored on Maslow theory of basic needs. The theory of hierarchical needs place a lot of emphasis on safety needs that includes security, stability, dependency, protection and freedom from fear, anxiety and chaos. According to Maslow, individuals are motivated by the unsatisfied needs in each level. The human psychological needs are arranged with the understanding that people are incapable of paying higher attention to higher levels needs when lower level needs remain unmet. Once the needs are met, they cease to be motivators and the individual moves up to the next level. The lower level needs include food, shelter, clothing and safety. With their physical needs relatively satisfied, the individual's safety needs take precedence and dominate behavior. Absence of safety may be due to war, natural or man-made disaster. The theory supposes that humans prefer a safe, organized and predictable world. They avoid physical harm and chaos and in cases of threats, safety needs predominate. The elements of safety needs in the theory, security, protection and freedom from chaos are relevant to the study and formed the basis of justification for this research which made recommendation on safety procedures and preparedness. The study sought to establish the extent to which schools are compliant to safety policies and preparedness to handle security threats to schools.

1.13 Conceptual framework

The Ministry of Education requires all schools to implement the safety policies to achieve certain general preconditions needed to be in place. Hogwood and Gunn (1983) stated some of these preconditions as adequate time, availability of resource, obedience and compliance of implementing agents, perfect communication between roles and agreement on objectives (figure 1.1). These preconditions may not all be satisfied at the correct time leading to “*implementation gap*”. The study was based on the concept that satisfactory implementation of policies depend on timely satisfaction of given preconditions policy outcomes depend on whether these preconditions are satisfied at the same time. For example, the availability of financial resources must be matched with the existence of capable human resource base. There must also be perfect communication among them and coordination of the various elements involved in the process. Understanding of an agreement on objectives should be clearly defined, specific, quantified, understood and agreed throughout the organization. They should be mutually compatible, supportive and provide a blue print against which actual programs can be monitored. To obtain compliance and obedience there should be no resistant to commands at any point in the administrative system. Finally, school heads require time to Marshall Resources and implement the policies on the ground. Their ignorance or unwillingness to act may affect policy outcomes in diverse ways.

Figure 1.1 illustrates the interplay of factors in the implementation process of safety policy in schools.

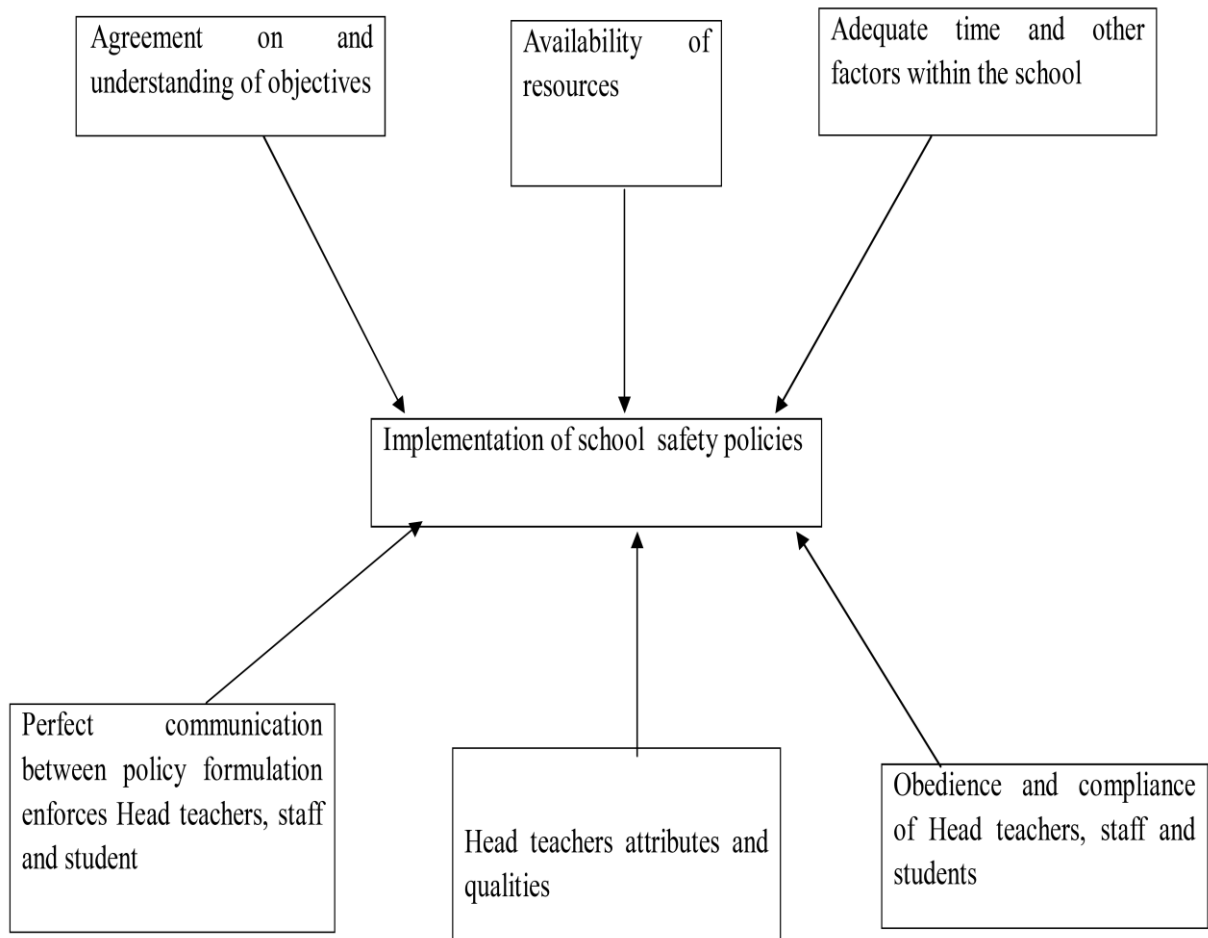


Figure 1.1 The interplay of factors in the implementation of school safety policy

Source: Hogwood and Gunn (1983)

The interplay of these factors may affect policy outcomes differently leading to policy failure or success. The conceptual framework will enable the study of safety policy implementation with a view to assessing their outcomes and the factors which influence them.

1.14 Chapter Summary

This chapter presented the background information about the school safety and various issues that surrounds that phenomenon in school. The chapter sort to lay out a context within which the study investigated the school safety policy in Kericho West District. Specific focus was on the research objectives that guided the study.

1.15 Operational definition of key terms

Disaster preparedness – means the ability of an individual or schools to anticipate a catastrophe and to make arrangements to eliminate or reduce its impacts.

Implementation - means the process of putting a policy into effect.

Implementation gap – means discrepancies between specific policy statement and outcomes on the ground.

Public secondary schools – means those secondary schools that get assistance from the government.

Safety policy – means government requirements on emergency preparedness in schools.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covers the following areas; the concept of policy implementation, safety policy implementation on the global scene and safety policy implementation in Africa and Kenya and related studies.

2.2 The concept of policy implementation

When the government has a policy on a particular issue, reference is usually to the specific statements that permit an activity to take place (Hogwood & Gunn, 1983). The government's function in this regard is to protect the interest of all members of the society by a system of universally accepted rules and regulations. The implementation of policy involves putting them into effect since mere formulation is not enough. Policy objectives must be translated into tasks, which must be accomplished on the ground (Marshall & Peters, 1999). In Kenya the implementation of safety policies in the schools involves the modification of existing buildings to comply with specific safety and health requirements currently in force. Safety practices must also be integrated into the school curriculum, (Republic of Kenya, 2001).

Policies are usually examined in terms of what is actually achieved. According to Hogwood and Gunn (1983), this enables some assessment of whether the stated objectives of a policy appear to be what the policy is actually achieving. Anderson (1975) points out that, policies usually have prior objectives but that these objectives might change or be ignored during the process of implementation. Consequently, responses to policies are ad hoc and seem to happen by chance, resulting in discrepancies

between formulated policies and their realization (Oduogi, 1975). As Bacharach and Baratz (1962) aptly stated, policy Implementation behavior includes involuntary failures to act as well as deliberate decisions not to act.

Discrepancies in the policy implementation process are called “*implementation gaps*”. According to Hogwood and Gunn (1983), these policy implementation gaps arise out of non- implementation or unsuccessful implementation. In the former case, a policy is not put into effect as intended, perhaps because those involved in its implementation have been uncooperative and/or inefficient or because their best efforts could not overcome obstacles to effective implementation over which they had little or no control. Unsuccessful implementation occurs when a policy is carried out in full, and external circumstances are favourable but the policy fails to produce the intended results.

2.3 Implementation of safety policies on the Global scene

School safety is a sensitive issue all over the world and factors affecting the safety differ from country to country but every country world over has measures in place to ensure schools are safe. Common safety issues include fire disasters, students’ strikes, vandalism, terrorist attacks, road accidents, lightning and overcrowding. Below are selected safety policy issues from selected countries worldwide.

2.3. 1 North and South America

There are various approaches used in enhancing school safety in the United States of America. School wide policies and practices are expected to systematically address needs of students, school personnel, the community and the physical plants of the schools. The United States Department of Education (USDE) requires safety policies in schools to be strictly enforced in view of the threats posed by terrorism, drug related

violence, proliferation of firearms and natural disasters like typhoons floods and hurricanes (USDE, 2004). Most American public schools have zero tolerance policies on activities that are likely to compromise safety. In the 1996/1997 school year, 90% of schools reported zero tolerance policies for firearms. The abuse of firearms in American schools has resulted into deaths and injuries in the past. In the same period of time, schools employed a number of approaches to enhance security. Ninety six per cent of public schools required visitors to sign in before entering into the school plant. Eighty per cent of public schools had a closed school policy that prohibited students from leaving school premises except at specified times. Six per cent of schools had policemen or other law enforcement personnel stationed thirty hours a week or more at the school in a typical week (USDE, 2004).

A survey conducted by the National Association of School Resources after Beslan School massacre in September 2004 found out that 76% of more than 700 school officials in the United States felt that school facilities are not adequately prepared to respond to a terrorist attack. 62% of the school officials felt that emergency response plans had not been adequately rehearsed (Cavanagh, 2004). Zicherman (1992) states that American Building Codes take school safety into account with regard to the following aspects: first in the general architectural concept of buildings. The second aspect is the means of direction and alarm, passive and active protection as well as building characteristics, which may affect the fire fighting activities. Finally, building codes take into account the probable behavior of building occupants during any emergency. Various studies have been conducted on the influence of building layouts on occupants during an emergency.

Pauls (1980) found out that exit routes carry higher than normal use loads and are used more frequently for emergency exits. This results into 14% increase in the mean evacuation flow and a 9% increase in flow when exits lead to the main reception area which is often the centre of communication. The mere provision of the fire exit route is not enough to guarantee their use. Canter (1980) states that out of 85 victims of four fires, only eleven attempted to use the fire escape, and of those only five were successful. Wood (1972) states that motivation to evacuate is related to knowledge of escape routes and the kind of training that one has received. Training on emergency operations and knowledge of an escape route tended to make a person remain behind to fight the fire than to evacuate immediately. Same (1983) provides evidence that the standards of fire safety knowledge among institutional staff is high and that although most questions in fire safety questionnaires are answered correctly, around 40% of respondents did not know what constitutes the essential ingredients of fire or how to fight a small fire in safe and effective way. Thus ascertain the extent to which knowledge translates into efficiency of action during real life.

Studies conducted by Pauls (1980) and some (1983) provide evidence on the behavior of people in fire emergencies. For example, they investigated whether fire victims used safety systems effectively, the factors that motivated their escape from emergencies and the standard of fire safety knowledge amongst institutional staff. These studies were psychological and were based on *ex post facto* interviews with victims of major American fire tragedies. The current study differs from these studies because it investigated other aspects of safety besides fire safety. For example, it investigated the extent of safety policy implementation with regard to school buildings, security, water

sanitation and the environment. In addition, the factors affecting safety policy implementation and the role of head teachers in the implementation process was studied.

The modern school buildings in Venezuela are highly vulnerable to earth quakes. For example, in the 1997 Venezuela earthquake modern school buildings collapsed leading to the death of school children. Since then, Geo-Hazards International (GHI) has implemented the school seismic safety program in Venezuela. The program which affects the vulnerability of schools has been found effective due to its sustainability. Teachers are trained on safety procedures then they train future generations of children. The program has made the regulation of the design and construction of school buildings easy in Venezuela (GHI, 2004).

2.3.2 Europe

The safety policy implementation and security policies in European countries have been greatly influenced by school tragedies and near misses (Cavanagh, 2004). The September, 2004 school hostage crisis which led to the massacre of 320 children, teachers and parents in school number one in Beslan, Russia led to the provision of armed military personnel to guard schools. This was done to prevent future terror attacks on Russian schools. Cavanagh (2004) further states that since the 1993 school hostage crisis in the French City of Neuilly – Sur-Seine, police authorities regularly coordinate security with school officials. Police and school officials meet at the beginning of each term to regularly coordinate security details of schools. In Paris, policemen are stationed in front of public schools to provide security, maintain the traffic flow and check suspicious activities. The Work Environment Act of Sweden makes it the duty of school managers and subordinates to organize school safety activities jointly though the main

responsibility rest with the Managers. A safety handbook for schools has been published addressed to all persons responsible for the school working environment. It deals with the general environment of schools with the objective of simplifying the interpretation and implementation of these regulations in schools (UNESCO, 1986).

The earthquakes in Italy and Turkey, which occurred in 2002 and 2003 respectively, led to the deaths of students and teachers. School buildings were also destroyed. These earthquakes helped to refocus attention on the school buildings safety, especially with respect to seismic vulnerability. Consequently, the organization of Economic Co-operation and Development started the Program on Educational Buildings (P.E.B). The initiative aims to review progress on programs for screening, evaluating and strengthening existing buildings in high risk areas of Europe. It also aims to strengthen the principles of satisfactory school building design through the use of qualified engineers, adequate building codes, independent reviews and hazard investigations (O.E.C.D, 2004).

In Netherlands school safety policy focuses on the safety of premises, school capacity building, bullying and improvement of incidence response. The Amsterdam school safety project is a five year project involving forty secondary schools. It uses school safety plans, physical improvement to the school and curriculum and social supports to promote an interactive preventive approach to school safety in participating schools (Soomeren, 2002).

2.3.3 Asia

The poor or total lack of the implementation of school safety policies has been a cause of concern in both India and China. The July 2004 Indian school fire in which 90 children died was blamed on failure to fully follow safety norms. The school building in this case was overcrowded and had only one exit. There were no emergency doors or fire fighting equipments. School tragedies in India, including the 1995 school fire, which led to the death of 400 students, are blamed on failure by Regulatory Authorities to enforce safety norms. For example, schools may stay for as long as three years without being inspected (Reuters, 2004).

In China, the 2001 school blast in which a storied building collapsed on school children was blamed on selective implementation on safety policies. Various regulations governing safety in schools have since been strengthened. These include the law on the protection of minors, the Law on Compulsory Education and the Teachers' Law. Some Chinese schools have had to cancel activities like gymnastics to reduce death and injury associated with the rigours of physical education. Chinese schools are required by law to take responsibility for managing and protecting students in their premises. Consequently, they are required by the law to buy liability accident insurances to compensate death and injuries that occur in the school premises (Cernet, 2004).

2.3.4 Africa

Eleven percent of gun related deaths in South Africa are of school going children. The fire Arm Control Act was enacted in the year 2000 to try and address this problem. The Act allows the Minister for Safety and Security to declare schools firearms free zones. This means anybody not complying with the firearms free status is prosecuted (Gun

Control Alliance, 2000). Eliseev (2003) reported that South African children are run over by cars near their schools week after week. To try and stop this carnage, the Johannesburg road agency has started a drive to install speed bumps near the city schools. Between June and July 2003, bumps were provided to the schools at a cost of 1.7 million Rands (Shaw, 2002).

The labour Act in Nigerian provides for the health and safety needs of learners in educational institution and other sectors. The health and safety hazards in school environments are responsibilities of school management and other school personnel who ensure effective and efficient measures to maintain safety in the institutions using proactive rather than reactive approaches (Cecilia, 2009).

In Zambia, school safety policy requires schools to apply strong and consistent screening procedures for all staff and volunteers. These procedures should include: written application references, interviews and background checks in the school gates. Schools are expected to have written code of contact explaining not only the specific behavioral standards for all adults in their interactions with children in school but also clear written guidelines about an expected behavior of children towards other children. Schools are expected to establish initial and ongoing training for all staff and volunteers as well as children on safety training. The policy further requires schools to have written guidelines for each age group and activity. These guidelines are designed to reduce risks by minimizing isolation, increasing accountability and balancing power and control. Schools should require all staff and volunteers to demonstrate by signing that they have read the guidelines and are committed to them (Haile,2011).

In Uganda, a quality school is defined as a school that is safe, healthy and with a friendly environment without violence and hostility, drug free and well equipped facilities. Development agencies like the National government, district government, communities, parents and private sector partners have tried to respond to this infrastructural aspect of educational quality. Uganda has implemented the Safe School Contract (S.S.C) as one of the identified interventions which strengthen the role of teachers, pupils, parents and their involvement in children education to enhance quality learning. The Ugandan Ministry of Education and Sports and USAID introduced more than 200 schools to S.S.C. by 2008 so as to enhance safety in schools. Stake holders identified issues; define safety, the consequences for not having the safe environment for pupils and ways to improve safety of the children. Through the experiences in the 200 supported schools S.S.C. offers a feasible mechanism for promoting safety in schools through strengthening school community partnership and child participation (Lulua, 2008).

2.4 Implementation of Safety Policy in Kenya

In Kenya, provisions relating to the procurement and systematic assurance of the quality of educational infrastructure appear in various legislations, statutory instruments and policy documents (Republic of Kenya, 1999). Registration may be denied to schools or be revoked if school buildings are not suitable and adequately having regard to the number, ages and sex of the learners who are to attend school. School buildings must conform to the prescribed requirements of health and Safety, and fulfill building regulations currently in force. School buildings must be drawn by a registered architect, put up by a registered contractor and quantity surveyor and any electrical wiring done by

a registered electrical Engineer (Republic of Kenya, 2003). Clear fire instructions should be prominently displayed throughout the school for the benefit of the staff and learners. This is important especially in special practical rooms such as laboratories and workshops where fires are prone to occur. In addition each room should have an appropriate fire extinguisher, a First Aid Kit for treating minor cuts and injuries promptly and exit doors that open outwards. Learners must also be made familiar with safety precautions necessary in laboratories, workshops and other special rooms (Republic of Kenya, 1987).

The fire tragedies at Bombolulu Girls, Nyeri High and Kyanguli Mixed Secondary Schools in 1998, 1999 and 2001 respectively, together with the spate of arson cases in other Kenyan Secondary schools over the years pushed the issue of school fire safety into public debate. According to the Daily Nation of 28th March 2001, school facilities must include fire fighting equipments maintained to internationally accepted standards, and enough members of staff and students who can use them correctly (Daily Nation, 2001). Akombo (2004) observes that the recent fire disasters in schools have not ignited changes in our approach to fire and student security. He calls on the government to come up with the safety codes to enhance student safety in schools. The safety code should look into buildings protection and evacuation in cases of fire, terrorist attacks, weather related disasters and other natural calamities. Policy makers should be enlightened on why this national safety code should be enhanced and why this national safety code should be adopted and integrated into our building code.

In addition to the safety requirements that exist in the various Acts of parliament, the Government released circulars number G9/1/VOL III/138 and G9/1/169 of April 2001, and a school safety manual of 2008. In summary, the two policy circulars and the safety manual require school heads to reside in school and to implement school safety standards. This include requirements that existing buildings be modified to fit given specifications. Stairways should be placed at both ends of storied buildings and should be at least 1.2 meters wide and dormitory doors should not be locked from outside when students are sleeping in them. The spacing of beds is also specified as 1.2 meters. Classrooms should be built upwind from laboratories, kitchens playgrounds and toilets. The longer sides of classrooms should also run in an East – West direction (Republic of Kenya, 2001, 2008).

No facility protection program is complete without clear, well defined policies and programs confronting the possible threat of fire, or any other natural or manmade disaster. Emphasis on physical safeguards should not down play the human aspect of safety and emergency protection. Disastrous losses often occur not from the failure or absence of physical safeguards but from human error. These are enumerated as the failure to maintain existing protection systems in good working condition, the failure to inspect or to report hazards, and at management level, the failure to ensure, through continuous education and training that the organization remains prepared at any time for any emergency (Green & Fisher, 1987).

The education Act prescribes the number of students who should be in secondary school classroom as forty (Republic of Kenya, 2008). Circular Number R/MMMCC/L volume 2/28 spells out that the standard size of classrooms for forty pupils should measure 9 meters by 7.5 meters. To ensure dormitories are not crowded, corridor and bed spacing

are specified as 2.0 meters and 1.2 meters respectively (Republic of Kenya, 2001, 2008). Literature reviewed however reveals that most of the schools in which fire occurred had dormitories housing more students than the intended capacity. According to the Daily Nation edition of 28th March 1998, the crowding at the Bombululu Girls dormitory made for a chaotic scenario during the fire as the frightened girls scrambled for safety. It is noted that the death toll would have been much lower if the dormitory population would have been kept as required. Lack of fire escape routes, metal grilles on windows and a bolted front door compounded the problem (Daily Nation, 1998). Odalo (2001) reported that overcrowding at the Kyanguli dormitory also emerged as a major concern because it impeded the escape of children. Siringi, (2001) stated that boarding structures are to blame for the majority of school fire deaths. He adds that dormitories should be properly designed to facilitate evacuation in times of danger.

Concerning the issue of students' health, it is stipulated that the school matrons and nurses must be qualified in First Aid Education. The number of closets, washbasins and toilets for a given number of students are also spelt out. For example, it is specified that the requirements for girls' boarding sanitation should be seven closets for every fifty students. For every fifty boys, there should be five closets and two urinals. Pit latrines should be equal to or more than 6 meters deep regularly disinfectant and 15 meters away from water supply source (Republic of Kenya 1999, 2001, 2008). In addition, the government is being challenged to ensure that water used by schools is treated to curb outbreaks of waterborne diseases. Most schools in rural areas depend on untreated water from streams and rivers, which put them at risk of contracting diseases (East African Standard, 2004 July 20th). An example is the outbreak of Swine fever in Chesamisi High

school in Bungoma District in June 2004. According to Kasumba (2004) the school's main source of water, a stream was confirmed to have sparked off the fever, which resulted in the death of seven students and the hospitalization of at least 3 teachers. It was only after these deaths that the authorities took seriously the need to treat water for students. The Ministry of Education's Manual for School heads states that school water pipes, taps and junctions should be inspected regularly and washers replaced as needed (Republic of Kenya, 2003).

Legal Notice Number of 161 of 3rd October 2003 requires public service vehicles to be fitted with Safety Belts and Speed Governors (Republic of Kenya, 2003). Despite the publication of the legal notice and its enforcement on public transport, it was observed that most public institutions were not bothering to comply with this rule. This prompted the government to warn that vehicles belonging to public educational institutions like secondary schools are not exempted from this rule (Republic of Kenya, 2004). On the night of 13th March 2001, 12 students and four teachers died on a night time road accident in Kiambu (Muriuki, 2001). The Daily Nation of 15th March 2001 asserted that the Kiambu tragedy could have been avoided. It further asked why important government guidelines were being ignored. The government did forbid school parties travelling after dark expressly to prevent such accidents from happening either due to poor visibility or driver exhaustion. It added that the continued herding of school children into Lorries and buses at night brings into question the Education Ministry's resolve to eradicate such avoidable deaths (Daily Nation, 2001).

Security implies a stable relatively predictable environment in which individuals or groups may pursue their ends without fear of disturbance or injury (Cunningham & Taylor, 1985). In educational institutions, security practices and procedures cover a broad spectrum of activities designed to eliminate or reduce the full range of potential hazards, including loss, damage or injury (Green & Fisher, 1987). Education facility protection may be by means of barriers, fences, walls, gates, and lighting and surveillance guards. The Republic of Kenya (2001) states that adequate security personnel should be provided in schools. This view was reinforced by the Daily Nation editorial of 27th March 2001, which stated that Parents and Teachers Association (PTAs) must seriously look into the issue of security in schools (Daily Nation, 2001). It added that from the incidences of invasions and arson attacks, it is apparent that schools stint on the cost of security, especially at night, at the expenses of the safety of learners. The 2007 arson attacks at Kakibei secondary school in Kericho West District are attributed to security lapses, which saw arsonist, sneak into the school with petrol, torch a dormitory and slipped undetected into the night. To improve security at Nyang'ori High School for instances, the regular watchmen from the area were sacked after the June 2004 arson attacks and replaced by four Maasai Morans (Oduor & Atsiaya, 2004).

According to Green and Fischer (1987) the cause of security can be furthered by making it more difficult for criminals to get into premises. This can be realized by erecting an adequate barrier or fence. Accordingly, a standard barbed wire fence should be 12 gauge twisted double strand with four point barbs placed four inches apart. Barbed wire fence should also be seven feet high and additionally carry a top guard and post should be metal and six feet apart. Fences and barriers alone may not be sufficient protection for schools,

they need to be complemented with adequately trained security personnel and lighting. Kakalik's and Wildhorn's, (1999) description of the typical security guard is an ageing male, poorly educated, usually untrained and very poorly paid could still be regarded as the norm rather than the exception.

The implementation of educational policies in Kenya is hampered by a combination of factors. Inept and corrupt school heads hamper the implementation of educational programs. Ineffective monitoring and evaluation of projects occasioned by incompetent and untrained staff and lack of finances has also been blamed (Republic of Kenya, 1999). Wamahu (2001) stated that inspection of schools is rare and haphazard. Efficient operation of inspectorate staff is hampered by inadequate funds and transport. The issue is that policies are issued but may never be satisfactorily implemented. Due to this apparent lack of follow – up, many schools have disregarded the implementation of safety policies. These are general statements which are not quantified by specific figures. This study endeavored to fill this gap by including figures to illustrate the extent of safety policy implementation in Kericho West District Secondary schools.

2.5 Community role in school safety

A statement by National safety (NSSC) 1997, stresses the need to involve the community in school issues just as communities work together to prevent crime with neighbourhood watch programmes where local residence can be mobilized to make schools safer. It is essential to communicate to this group that they do have direct as well as indirect relationship to local schools. Public opinion polls suggest that the more citizens are involved in schools, the more likely people are to have a favorable opinion of schools NSSC (1991). Parents, community residents, retired teachers, senior government officials

and volunteers can be encouraged to participate in school activities that make them feel part of the school.

According to NSSC (Ibid) report seniors in the society can participate as teachers or staff aids, students' advisors, mentors and tutors, special activity organizers and playground supervisors. Community members can help during a crisis for instance putting off fire outbreak. There is a general feeling that parents' contribution to school safety is needed. However several factors such as individual interest, levels of one's education and cultural background may have a direct bearing on their ability to deliver useful support. Generally, it is a critical issue given that the leaders may find themselves being tempted to interfere with the school issues rather than just providing support. Community role therefore should be evaluated to establish existing gaps or success for proper planning.

2.6 Related Studies

Migiro (2012) investigated the implementation of the recommended safety standards in public secondary schools in Borabu District, Kenya. The findings revealed that most public secondary schools in Borabu District, Kenya were aware of the existing Ministry of Education safety policy guideline, but that majority of the schools had not implemented it fully. The study revealed that the status of school safety was wanting, and that the public secondary schools that tried to implement the Ministry of Education safety standards faced number of challenges key among them lack of funds.

Mburu (2012) sought to identify factors influencing the implementation of safety standards in public secondary schools in Limuru district, Kiambu County, Kenya. The study found out that all the sampled schools had set up safety committees and the committees met frequently. Some of the teachers sampled schools had set up safety committees and the committees met frequently. Some of the teachers sampled had come across the safety policy manual in their schools but others had not. The learners confirmed their involvement by the school administration in safety programmes to some extent. The teachers confirmed that they had attended safety training programmes at 63% while 37% of the learners sampled had equally attended safety training programmes.

Wanyama (2011) sought to ascertain the level of compliance with health and safety standards for the emergency response in secondary schools in Sabatia District, Vihiga County, Kenya. The findings of this research showed that majority of secondary schools in Sabatia District had complied with health and safety standards for the emergency response in the in the provision of infrastructure and in hygiene. All the schools in the study had over 60% compliance in provision of perimeter fence, doors to the buildings opening outwards, stairs on both ends of storey buildings, emergency exits on laboratories, halls and dormitories, removal of window grills and long walls of classrooms running from east to west. There was however less than 20% compliance by schools on the fitting of lightning arrestors on buildings. On hygiene, there was over 80% compliance by schools in providing uniform to their non-teaching staff and medical examination of food handlers. There was less than 30% compliance.

Ntheya (2011) investigate the participation of secondary school administrators in school safety and implementation of safety policies with regard to physical infrastructure and waste disposal in some selected public schools in Kenya. The study found out that only 20% of the schools had constituted safety sub-committees, none (0%) of the HTs and DHTs served as secretary or member of the sub-committee respectively as required by policy. All respondents ranked school safety last with curriculum, extra-curriculum and guidance and counseling respectively being given more priority. The study also established that HTs attitude on implementation of school safety was positive with an average score of 64.29%. Whereas 92% and 82.67% of the schools had fitted fire windows/doors without grills and fire extinguishers respectively, a paltry 16% had not fitted fire alarms while none (0%) posts evacuation maps in its buildings nor has established a monitoring and evaluation system of school safety. With regard to waste disposal, the majority 65.33% employed unsustainable means of waste disposal where they would abandon pit latrines once they are filled up and excavate others and another 21.33% manually emptying them with buckets exposing workers to the risk of contracting communicable diseases. Further, only 29.33% provided learners with gloves wherever they cleaned their sanitation facilities while none (0%) undertook waste segregation. The author concluded that the participation of school administrators in school safety issues was low and the overall implementation of safety policies was way below the requirements as stated in the safety manual.

Omolo and Simatwa (2010) carried out an assessment of safety policies in public secondary schools in Kisumu east and west districts, Kenya. The study found out that the school principals and QASOs attitude on safety policies was positive, dormitories in 70%

of the schools had emergency doors and 96.7% of the schools had first aid kits. However, there was decreasing trend in conducting fire drills, only 26% of the schools had fire extinguishers, there was crowding in 70% of the schools had fire extinguishers, there was crowding in 70% of the schools and 93% of them had inadequate toilets therefore the overall implementation of safety policies fell short of the requirements.

Musimba (2005) conducted a research on a comparative study of the levels of adherence and implementation of safety standards guidelines in secondary schools in Machakos District and established that most head teachers were committed to implementing the guidelines. The study found lack of finance as the main cause of failure in levels of implementation of the guidelines.

2.7 Chapter Summary

The literature reviewed has established that school safety is a sensitive issue all over the world. The issues affecting school safety differs from country to country. Studies on the concept of policy implementation done by Hogwood and Gunn (1983) stated that one of the government functions is to protect the interest of all members of the society by a system of universally accepted rules and regulations. The safety of learners is central to the provision of quality education in any country. As seen in the literature every country has put in place measures to make schools safe zones. In USA school wide policies and practice are expected to systematically address needs of students, school personnel the community and the physical plants of the school. Safety policy implementations in European countries have been greatly influenced by tragedies in schools. To prevent terror attack in Russians schools armed military personnel have been deployed to guard schools. Earthquakes in Italy in 2002 and Turkey in 2003 forced the respective

governments to refocus attention on school building safety. In China, the school blast of 2001 where 57 students died, forced the government to put in place various regulations governing safety in schools. Chinese schools are required by law to take responsibility of managing and protecting students in their premises.

In South African Fire Arm Control Act was enacted in the year 2000 to address the problem of gun related deaths. In Kenya fire tragedies notably the Bombolulu Girls, Nyeri High, Kyanguli secondary school in 1992, 1999 and 2001 respectively together with the spate of arsons cases in other Kenyan secondary school pushed the issue of fire safety into public debate prompting the government to develop school safety policy. The above literature also shows concern by the different governments on safety and overall welfare of learners. In the course of reviewing literature the researcher identified several gaps in the existing studies. This study attempted to fill these gaps. Every country is committed to the safety of learners in schools. Revealed from the above reviewed literature and the fact that few studies have been done in Kericho West District, the current study endeavoured to verify the extent to which safety policies have been implemented in the district.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter covers the research design used in the study, the area of study, target population, sample and sampling techniques used, instruments used to collect data, reliability and validity of research instruments, data collection procedures, ethical issues and the methods used to analyses data.

3.2 Research design

The study used descriptive survey design. The design was suitable because it focuses on people, their attitudes, opinions and behavior and it also seeks to describe and analyze the culture and behavior of humans and their groups from the point of view of those being studied. The study was concern with the implementation of safety policies, the use of survey research enabled the exploration of opinions, attitudes and behavior of school Head teachers in the implementation of safety policies in the sampled public Secondary schools (Kombo,2006).

3.3 Area of study

The study was done in Kericho West District, Rift valley province in the western part of Kenya, which borders Kericho East, Bureti to the south, Nyamira to the south west, Nyakach to the west and Nyando to the north. The district covers an area of 534.6 Kilometres square and has a population of 187,101. There are 30 secondary schools of which 28 are public schools. The predominant economic activity in the district is small scale farming which accounts for 78% of the population (Republic of Kenya 2005).

3.4 Target population

The study focused on 28 public secondary schools in Kericho West District with a population of 275 teachers and 7571 students. Nine schools and nine head teachers were involved in the study. One Quality Assurance Officers was also involved in the study.

3.5 Sample and sampling procedures

Stratified random sampling technique was used to select 30% of the public secondary schools for the study since this size according to Orodho (2010) is an ideal representative sample of the study population. These amounts to 9 schools and 9 head teachers, the strata was based on school types, boys, girls and mixed schools. Of the 28 Public Secondary School in Kericho West District 2 are for boys and 3 are for girls and the remaining 23 are mixed schools. Simple random sampling technique was used to select 30% of the schools which took part in the study (Orodho, 2010).

3.6 Research instruments

The instruments of data collection were: observation schedule, the head teachers' questionnaire and the Quality Assurance and Standard Officers' interview schedule. The selection of these tools was guided by the nature of data to be collected, the time available, the nature of respondents and the objectives of the study.

3.6.1 Observation schedule

Observation was used to verify the information obtained from interview schedules and questionnaires. They were used to assess the extent of the implementation of safety policy. For example, by checking whether fire fighting equipments are available, whether safety notices are prominently posted, whether emergency exits are there and

whether school buildings have been modified to fit the safety specifications and the functionality of the equipments and safety measures.

3.6.2 Head teacher Questionnaires

The head teacher questionnaire was the main tool of data collection and it contain two parts; part A was used to collect general information about the school like the name of the school, type of school, size of school and students population. Part B was used to collect specific information about the school like the number of watchmen, Nurses, Matrons, sanitation facilities, availability and functionality of safety devices like lightning arrestors, fire extinguishers, detectors and alarms, number of teachers residing in school and the number of inspections since 2005. Part B also had an attitude scale consisting of 10 items used to gauge Head teacher's attitudes towards safety policy implementation in schools.

3.6.3 Quality Assurance Officers Interview Schedule

The Quality Assurance officers' interview schedule was used to collect information on the challenges faced in the implementation process and the possible solutions to the challenges of safety policy implementation in schools.

3.7 Reliability of research instrument

Kothari (2008) defines reliability as the measures of the degree to which research instruments yields consistent results or data after repeated trials. In order to test the reliability of the research instruments the researcher carried out a pilot study in two schools in the neighbouring Kericho East district and the data collected was scored. This was repeated after two weeks and again the results were recorded. Test re-test method was used to ascertain reliability of the instruments. Nunn ally (1978) defines

Chronbach's alpha as a measure of squared correlation between observed scores and the true scores. A reliability coefficient of 0.70 and above is considered acceptable in social science research studies. This study used Chronbach's alpha to find the reliability of the research instruments and a Chronbach's alpha of 0.76 was found and therefore the researcher was convinced that the research instrument were reliable and suitable for the study.

3.8 Validity of research instruments

Orodho (2010) defines validity as the success of a scale in measuring what it is set to measure so that differences in scores can be taken as representing the true differences in the characteristics under study. A valid instrument should therefore contain content that is relevant to the study. In order to ensure validity of questionnaires and interview guides, the instruments were design based on the objectives of the study in order to capture the required information and they were approved by the supervisors and views of research expert were also sought on the same.

3.9 Data Collection procedure

The researcher obtained a research permit from the Ministry of Education and authority from the area District Commissioner and the area District Education Officer. The researcher communicated to the Quality Assurance Officer and Head teachers of the sampled schools requesting for their cooperation and to use their schools for the study. This was done one month before the study was undertaken to ensure the school authorities received information in time. Three visits were made to the schools for familiarization, distribution of questionnaires, observation and finally collection of questionnaire.

3.10 Ethical Issues

The study abided to all ethical standards and procedures pertaining research. Authority and permission to conduct the study was sought from NCST, Kericho West DC, Kericho West DEO and Principals before the administration of research instruments to the respondents. The respondents especially the Head teachers were assured of confidentiality of information and documents accessed during the study. No inducement was given to the respondents to make them participate in the study. Respondents were informed of their rights in the exercise before participation.

3.11 Data analysis procedures

Qualitative data collected from open – ended section of the head teacher’s questionnaire and the QUASO interview were analyzed on an ongoing process as themes and sub themes emerged. Data from open ended questionnaire were useful for the purpose of obtaining qualitative data that are non quantifiable and enable the researcher to establish patterns, trends and relationships in the information gathered (Mugenda &Mugenda, 2003). The responses were categorized according to the research objectives. The data from closed ended section of head teachers questionnaires and observation schedule was analyzed by use of descriptive statistics in terms of frequencies, percentages and means then presented using tables and graphs. Frequencies in tables and bar graphs were used in analyzing head teacher qualitative questionnaire so as to give a clear picture of the state of safety policy implementation in the schools. Percentages were used to get factors that influence safety policy implementation and solutions to the challenges affecting the implementation process.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

Schools have an important role to play in ensuring safety of learners, staff and other workers in the school. In view of this important role and the requirement by the Ministry of Education, This study was designed to assess the extent to which school safety policy have been implemented in public secondary schools in Kericho West District. The findings of this study are presented in this chapter. The study was guided by the following objectives:

- (i) To investigate the extent to which safety policy has been implemented in public Secondary schools in Kericho West District.
- (ii) To examine the factors influencing the implementation of safety policy on public secondary schools.
- (iii) To determine possible solutions to the challenges affecting the implementation process.

4.2 State of safety policy implementation in public Secondary schools

The state of safety policy implementation was addressed by seeking views of the Head teachers by use of a questionnaire and observation check list in the sampled schools by the researcher. Respondents' views were presented in a table 4.1

4.2.1 Head teacher's views on safety policy implementation

The head teacher's view on the state of safety policy implementation was obtained by use of a questionnaire with two parts. Part A of the questionnaire dealt with general information about the school and Part B focused on the information on the state of safety policy implementation in the schools. Respondents' views are presented in Table 4.1.

Table 4.1: State of safety policy implementation as indicated by Head teachers

Safety policy guidelines	Frequency (n=9)	Percentage (%)
Head teachers residing in school	9	100%
Use of experts in building and construction	8	89%
Classroom situated upwind from laboratories kitchen and toilet	6	67%
Fire fighting devices	5	56%
First Aid Kits	5	56%
Safe source of water	4	44%
Regular inspection of students and premises	4	44%
Personnel trained in First Aid	2	22%
Fire drills done since 2005	2	22%
Building installed with lightning arrestors	0	0%

The views of the Head teachers on the state of safety policy implementation in public secondary schools were as shown in table 4.1. Out of the sampled schools nine (100%) indicated that Head teachers resides in the school. A total of eight (89%) of the schools

showed that they use experts in building and construction. Six (67%) of the respondents show that classrooms are situated upwind from laboratories, kitchens and toilets. The research shows that five (56%) of the sampled schools have First Aids Kits. Four (44%) showed that they have safe source of water and that they have regular inspections of students and premises. Two (22%) of the sample schools have also showed that teachers are trained in First Aid and a similar number showed fire drills have been conducted in the schools in recent years. According to the results in the table no school (0%) has installed lightning arrestors despite the area being prone to lightning strikes. The results in table 4.1 show that the safety policy requirements were positively responded to though areas like installation of lightning arrestors and training of teachers in First Aid needs attention.

Head teachers being the main players in the implementation process, their attitude towards implementation process were also sought and their responses presented in Table 4.2.

Table 4.2: Head teachers' opinion on the state of safety policy implementation

Safety policy statement on implementation	Head teachers score on Implementation					
	A	SA	U	D	SD	MS
Schools cannot afford to implement safety policies'	-	20	-	6	1	3
Implementation of safety policies in schools not necessary	-	-	-	4	7	1
Schools should source for funds to fully implement safety policies	25	16	-	-	-	5
Disaster management training should be made compulsory to teachers	30	8	3	-	-	5
Schools should conduct fire drills regularly	15	24	-	-	-	4
Implementation of safety policies is important to teachers and students	25	16	-	-	-	5
School disasters are inevitable even with safety systems	-	32	-	2	-	4
School should prioritize implementation of safety policies	20	20	-	-	-	4
It is impossible to implement safety policies even with resources	5	-	-	6	5	2
No need to involve registered professionals in design and construction	-	-	-	4	4	3

KEY

SA – Strongly Agree

D – Disagree

A - Agree

S.D – Strongly Disagree

U – Undecided

The Head teachers response to specific attitude scale statements based on the safety policy guidelines are shown in Table 4.2. The Head teachers checked against the safety policy statement to ascertain implementation, neutrality and non implementation. This information clearly shows three categories about safety policy guidelines where a mean score above 3.00 meant positive towards implementation, mean score of 3.00 meant neutrality while below 3.00 meant the safety policy was negatively responded to in terms of implementation.

4.2.1.1 Head teachers residing in school

This study established that nine (100%) of the sampled schools have head teachers residing in schools, the study also found out that other teachers reside in school in cases where there are enough housing facilities. Inadequate housing facilities affected all schools since they no longer receive government funding for housing. Teacher's houses are important for staff retention especially in remote areas. The purpose of the deputy head teachers and other teacher to reside in school was to enable them closely check on matters pertaining to boarding issues. The head teacher, deputy head teacher, and boarding masters reside in school to keep track of administrative issues as established by this study.

4.2.1.2 Use of experts in building and construction

Safety policy requires schools to involve professionals/experts such as public works personnel, registered architecture, quality surveyors and contractors in site planning, design, constructions and maintenance of school buildings. This study established that eight (89%) of the sampled schools use the experts and one (11%) don't use the experts. This shows partial implementation and reasons given was expenses and the long and

tedious processes involved. In the sampled schools visited at least toilets/latrines pits, classrooms, laboratories, dormitories and dining halls had cracked walls and leaking roofs, poorly ventilated dormitories with no ceiling boards, small windows and some glass windows without panes. These conditions create fear of the unknown among the students. The state of buildings in some schools was a clear indication of non involvement of professional/experts. The study finding revealed that dilapidated buildings in schools create favourable conditions for bedbugs, wasps and spiders. The condition reportedly affects students' concentration, capability and social welfare.

4.2.1.3 Personnel trained in First Aid

The study revealed that Two (22%) of the sampled schools have personnel trained in First Aid as per the policy guidelines, but in seven (78%) of the schools teachers and other staffs are not trained in First Aid. The study also revealed that schools don't have nurses. As a result, head teachers and teachers were unable to administer First Aid to students well. Thus implying students lives were at a risk in their hands especially where there are no nurses. In boarding schools, fainting, burns and bruises are some of the common cases that require skilled personnel equipped with First Aid knowledge. This study also established that students are not trained in First Aid skills to enable them deal with emergencies. Training though, necessary could only be effective if theory was linked to practice which was lacking in the schools as revealed by the study.

4.2.1.4 First Aid kits

The study revealed that First Aid kits were not put in laboratories, workshops and other special rooms in some of the sampled schools since the study shows that five (56%) of the sampled schools had proper First Aid kits as per the policy guidelines, but in four

(44%) of the sampled schools First Aid kits were not placed in the right place or totally absent. First Aids kits are absolutely necessary in the event of minor cuts or life – threatening situations. Despite the importance accorded to First Aid kits this study revealed that available First Aids kits in most schools were cosmetic tool boxes stored in offices rather than fully equipped and functional kits put in workshops, laboratories and special rooms. In most schools it was established that incase of accidents or sickness that calls for administration of First Aid one has to wait until taken to hospital. This safety policy guideline was therefore not satisfactorily implemented as per the policy guidelines.

4.2.1.5 Fire drills done since 2005

The safety policy requires that schools should conduct fire drills twice every term; however the study revealed that they were inadequately conducted since 2005. Although fire drills were rarely done, Two (22%) of the sampled schools conduct the drills regularly, seven (78%) of the schools have not been conducting the fire drills. However, head teachers strongly agree that students should be regularly trained in fire drills because of the inevitable fire disasters. This implies that safety policy guidelines was a theory rather than a practice which translates into a gap between policy as recommended and policy as implemented. The purpose of conducting fire drills was to sensitize and keep the students prepared in case of fire incidents or accidents but failure to do these rendered students vulnerable to fire. The response of this safety policy varied which implied that knowledge of whether drills were done as per the safety policy among Head teachers was tantamount to guesswork.

4.2.1.6 Classrooms situated upwind from Laboratories, Kitchen and Toilets

The safety policy requires school to build classrooms up wind from laboratories, kitchen, playground and toilets to avoid foul smell. This study revealed that six (67%) of the sampled schools have the facilities upwind. However three (33%) of the sampled schools are not compliant with the requirement. Head teachers cited that existing structures can only be renovated to comply with the policy requirements and some structure cannot be adjusted in a short period to comply with the requirement. Some schools will never comply since it will involve some of the existing structures being relocated an exercise that requires a lot of money which is not available in most schools. And the school community has learned to live with the problem.

4.2.1.7 Fire fighting devices

The safety policy guideline state that fire fighting equipments including hose reels, hydrant extinguishers, sprinkles and dry rinsers be provided. The current study findings showed that this policy was partially implemented. Five (56%) of the sampled schools have the fire fighting devices in place and four (44%) do not have the devices. However the equipments are not adequate to fight any fire outbreak in the schools. Head teachers responses shows that lack of funds to finance the installation of the equipments were the main problem. Property worth millions can be destroyed in schools should fire breakout for lack of this important devices. Student's life's, are also in danger. There was indication also that water is a problem in most schools so fixing hose reels is of no use. The common fire fighting device in most schools was hydrant extinguishers which are not enough.

4.2.1.8 Safe source of water

The study revealed that Four (44%) of the sampled schools have safe water for use and five (56%) do not have safe water. The policy guideline requires schools to have clean water for use in order to avoid water borne diseases. The guideline also requires pits latrine be at least 15 metres or more from water points to avoid water contamination. Head teachers response shows that they are treating water using chlorine but since 56% of the sampled schools do not have a good source of clean water for use, it is a big problem compounded by the fact that most schools in the area of study do not have piped water. An attempt to respond to this policy guideline is motivated by the need to have clean water. Based on this argument there is an attempt by all schools to successfully implement this safety guide.

4.2.1.9 Regular inspection of students and premises

Safety policy guideline require schools to be inspected regularly , that is, regular health inspection of premises and students to ensure their safety, however the findings of this study shows that four (44%) of the sampled schools conduct regular inspections and five (56%) do not. This implies that the safety policy is not complied with as stated in the guidelines. The purpose of conducting inspections of premises and students is to stop eminent danger. Dangerous buildings are risky to students, dirty dormitories and classes are a health hazard. Dangerous electric sockets and other risky devices should be corrected in time otherwise it can lead to fires and other health hazards. Students should reside in a clean environment to avoid disease outbreak. This can only be achieved through inspections. Regular cleaning and painting of the walls should be done on regular basis to give the walls a clean face. Since this safety policy is partially

implemented at 44% compliant then it is not easy to tell when painting and other renovations should be done.

4.2.1.10 Buildings installed with lightning arrestors

The study revealed that no school has installed lightning arrestors despite the fact that the school safety policy guidelines stipulated that school buildings be fitted with lightning arrestors especially in areas prone to lightning. Failure by the schools to install lightning arrestors is to leave students with danger as lightning can strike any time as has been reported recently in the neighbouring districts of Nyamira, Nandi, and Nyando. Most Head teachers cited lack of money and other priorities as the reason for non compliant to this safety policy requirement.

4.2.2 Observed state of safety policy implementation in Public Secondary Schools

The results of what was observed as the actual state of safety policy implementation on the ground are shown in the Table 4.

Table 4.3 Observed state of safety policy implementation in the Public Secondary Schools

Safety policy statement observed	Frequency (n=9)	Percentages (%)
Double doors opening outwards in dormitories and laboratories	8	89%
Window grills removed in the classrooms and dormitories	7	78%
Emergency exit in dormitories and laboratories	7	78%
Long sides of classrooms running east west direction	5	56%
Fire fighting equipments within reach	5	56%
Crowding evident in classrooms and dormitories	4	44%
Adequate perimeters fence and gate	4	44%
Safety instructions prominently displayed	3	33%

Table 4.3 shows that in eight (89%) of the sampled schools have double doors opening outwards in dormitories and laboratories were complied with, and seven (78%) of the schools had window grills removed and emergency exits adequately provided. Furthermore, five (56%) of the schools have the long sides of the classrooms running east – west direction and a similar number of the schools have fire fighting equipments within

reach. In four (44%) of the sampled schools there were crowding evident in the classrooms and dormitories and the same number don't have adequate fence and gate. This information also shows that three (33%) of the schools have safety instructions prominently displayed.

4.2.2.1 Double doors in dormitories and laboratories opening outwards

The safety policy guidelines states that dormitories and laboratories should have doors opening outwards, however the current findings showed that this policy guideline was partially implemented since the study established that eight (89%) of the sampled schools have dormitories and laboratories with double doors opening outwards and one (11%) is not compliant with the requirement. Lack of funds and the fact that implementation was an ongoing process were reasons attributed to the partial implementation of this policy guideline. This implies that in case of fire and other emergencies there is likely to be a stampede for safety at the door with resultant effect being injury and/or death. Fire vulnerability in learning institution was attributed among other reasons to doors opening inwards rather than outwards.

4.2.2.2 Emergency exits in dormitories and laboratories

Emergency doors in dormitories and laboratories should be clearly labeled and cleared off clutter. However, this study revealed that seven (78%) of the sampled schools implemented this safety policy and two (22%) of the sampled schools have not implemented the policy requirement. It was evident that most exits were barricaded and permanently locked up. One of the reasons fronted for locking emergency exit was to deter thieves from gaining entry into the dormitories. The action could be interpreted as situational interventions but in case of fire or building collapsing the effects is disastrous.

The implication was that the important function of emergency exit on dormitories failed to serve the intended purpose and by extension this particular safety policy guideline. Thus in case of fire, students or evacuators would experience difficulties making use of exits hence the dual's lives at a risk. Emergency exit on the dormitories were permanently locked and therefore not operational at time of need but there is need to clear off obstructions and clearly mark the exit door. Exit route maps should be posted on each corridor and classrooms to remind facility users of the escape routes in case of emergency.

4.2.2.3 Safety instructions prominently displayed

The findings of the study revealed that safety instructions were put in laboratories and workshops in three (33%) of the sampled schools as per the safety policy guidelines but in six (67%) of the sampled schools the instructions are not displayed as per the policy guideline. Though there was evidence of acquisition of laboratories and workshop safety instructions. The safety policy guideline requires that all buildings should have safety instructions and that students should be knowledgeable enough on the safety instructions and their application. Lack of safety instructions and inadequate exits as a safety measure contributes to learning institutions vulnerability to fires disaster.

4.2.2.4 Window grills removed in the classrooms and dormitories

The safety policy guideline states that window grills should be removed in the dormitories and classrooms however the current study findings showed that seven (78%) of the schools have implemented the policy, and two (22%) are not compliant to the requirement. The policy is satisfactorily implemented because the Head teachers feel it is cheap to remove the grills. Windows with grills pose a great danger to the students in

case of fire because of limited escape routes which can lead to stampede for safety through the door resulting to death or injuries. Fire deaths among the other causes in learning institutions is attributed to window grills which limit escape routes only to the door. One of the reasons given by the Head teachers for not removing window grills is to prevent thieves from gaining entry into the dormitories. This is an attempt to stop thieves but in case of fires or building collapse it is very dangerous to the students.

4.2.2.5 Long sides of classrooms running East-West directions

Safety policy requires that the long sides of the classrooms should run East-West direction to avoid the effects of sun's rays in the morning and evening. In the mornings the effects of sun's rays can be felt in one side of the classroom and the opposite is the case in the evening. The study revealed that five (56%) of the sampled schools are compliant with this safety requirement and four (44%) are not compliant to the requirement. Head teachers argued that some of the buildings were built many years ago before the coming into effect of the safety policy and cannot be renovated to be compliant with the policy. Only future buildings can comply with the requirements. This means students learning in these classes will continue suffering. The other reason put forward is the terrain of the land which doesn't allow buildings to run east – west direction.

4.2.2.6 Crowding evident in classrooms and dormitories

The safety policy states that overcrowding in classrooms and dormitories should be avoided. The current study findings showed that this policy is partially implemented. Four (44%) of the sampled schools shows overcrowding in classes and dormitories and five (56%) don't. Crowding is a health problem especially during outbreaks of

contagious diseases putting students' lives at risk. Crowding as observed in the dormitories can be disastrous if there is a fire outbreak as it can lead to congestions in the escape routes. Overcrowding especially in the dormitories contributes to vital incidences in case of fire outbreaks. Head teachers attributed the cases of overcrowding to lack of funds to expand facilities and the admission of students beyond the carrying capacity of the facilities.

4.2.2.7 Adequate perimeter fence

Among other requirements the safety policy guideline states that schools should have adequate perimeter fence and gate well manned for the institution to be a safe zone. This study's findings revealed that four (44%) of the sampled schools have adequate perimeter fence and gate and five (56%) don't have. This policy is partially implemented at 44% compliant. Lack of funds and the fact that most schools are in rural set up and also the fact that implementation was an ongoing process were the reason attributed to the partial implementation. Inadequate perimeter fence and gate is a security problem. Thugs can use the porous fence to gain entry into the school and attack students, steal their properties or even rape the female students in the school.

4.2.2.8 Fire fighting equipments within reach

The safety policy guideline requires that fire fighting equipments should be within reach for users to access but the current study revealed that five (56%) of the sampled schools have the equipments in the right place, but in four (44%) of the schools this requirement is not complied with. The purpose of putting the fire fighting equipments at a point easy to reach is to enable building users to reach them with ease in case of fire outbreak, failure by schools to install these equipments within reach is to leave students and other

users of the facilities vulnerable to fire burns since they don't have the equipments to use during fire outbreaks.

4.3 Factors influencing safety policy implementation in public secondary schools

In order to address the second objective, factors influencing safety policy implementation in public secondary schools in Kericho West District the researcher sought for the views of the Head teachers and the Quality Assurances and Standards Officers. The factors cited under this objective have either negative or positive influences.

4.3.1 Head teachers' views on the factors influencing safety policy implementation

Head teachers cited financial resources, regular assessment, and knowledge on safety, use of specialists, political good will and time frame as factors influencing safety policy implementation in public secondary schools in Kericho West district as shown in figure

4.1

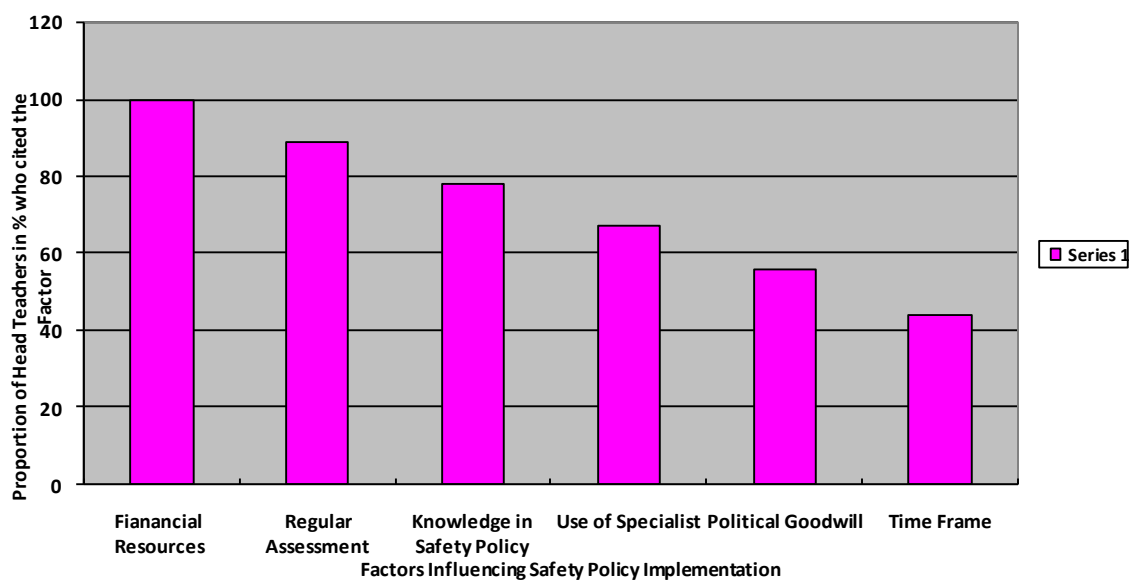


Figure 4.1: Head teachers' views on the factors influencing the implementation process

Figure 4.1 presents results of Head teachers view on factors influencing safety policy implementation in public secondary schools. The factors were as follows Nine (100%) of the Head teachers cited financial resources, Eight (89%) cited regular assessment, seven (78%) cited knowledge in safety policy six (67%) cited use of specialists, Five (56%) cited political good will and four (44%) cited time frame as factors that influence safety policy implementation in public secondary schools.

4.3.1.1 Financial Resources

The study findings revealed that financial resources were cited as playing an important role in the safety policy implementation success. Nine (100%) of the sampled Head teachers cited lack of funds as the biggest challenge to the implementation of the safety policy. Thus implying that indeed lack of funds was a hindrance to safety policy implementation hence the failure to achieve the objectives of total safety for students in schools. The study also established that lack of sufficient financial management is also a problem to the implementation. This study revealed that 100% of the sampled schools in Kericho West District lack the necessary finances for full implementation which is costly because it involves renovation, relocation, construction and purchase of costly equipments. Availability of funds facilitates faster implementation of the safety policy while lack or inadequate funds, commitment and skilled manpower dragged the implementation process. At any given level of resources, schools do not present the same level of efficiency because some are mismanaged.

4.3.1.2 Regular assessment

This study finding revealed that assessment was irregularly done, eight (89%) of the sampled head teachers cited irregular assessment by the Ministry of Education due to inadequate manpower and finances in the District Education Office to facilitate the exercise. This implied that schools were not assessed on safety policy matters due to lack of funds. Assessment provides a plan for the inputs in terms of finances, procedures to be used to monitor progress in reaching the targets, human resources regarding the expertise required and laying strategies for implementation within a given time frame. It is due to irregular assessment that the necessary mechanisms were not put in place at the initial stages of safety policy implementation hence partial implementation. This study revealed that the Ministry of Education failed to put in place the necessary benchmarks to ensure assessment of safety policy implementation, thus the Ministry influenced implementation. Project outcomes are often measured through the assessment level of usage and satisfaction with services offered.

4.3.1.3 Knowledge in safety policy

Knowledge in safety was an advantage for successful implementation of safety policy. Seven (78%) of the Head teachers cited knowledge in safety as a factors influencing the implementation of safety policies. This study therefore revealed that successful use of fire fighting equipments need adequate knowledge in the use of the equipments while lack of it rendered the equipments useless at the time of need. Knowledge in fire fighting is necessary for successful use of fire fighting equipments. However such knowledge was inadequate among school community members. It was further established that though some Head teachers were trained in safety policy matters there was however a gap between theory and practice which influenced successful implementation. This was

confirmed in the administration of First Aid, conducting of fire drills and selecting of authenticated fire fighting equipments during purchase.

4.3.1.4 Use of specialists

The study findings shows that six (67%) of the sampled head teachers cited use of experts like public works personnel, registered architectures, quality surveyors and contractors in site planning, design, construction and maintenance of school building as a factor influencing the implementation process. However, three (33%) of the sampled head teachers didn't find it as an issue. The head teachers revealed that for buildings in schools to meet the required standard experts should be used. Head teachers attributed to the non use of these experts to the high cost though they appreciate the quality of work done by the experts and the long tedious process involved in tendering.

4.3.1.5 Political goodwill

Policy making is about politicians who have a great influence on its implementation. The current study findings revealed that politicians are in a position to influence safety policy implementation through financial support and ideas to the schools and local community. Five (56%) of sampled head teachers cited political good will as a factor influencing the safety policy implementation process. Positive attitude to safety policy implementation was realized through the Constituency Development Fund (CDF) especially in the construction of dormitories and classrooms to ease congestions. Schools receive school buildings from politicians while in other instances politicians paid for school building construction at the schools. The perception was that politicians had an influence on safety policy. Political goodwill was evidenced in CDF projects where some schools benefited more than others.

4.3.1.6 Time frame

Deadlines and ultimatum are characteristics of communication in Kenyan schools as a way of keeping the concern on toes. Four (44%) of the sampled head teacher mentioned timelines for implementation as a factor influencing the implementation process. This study further established that there was no specified timeframe within which safety policy should be implemented. Consequently, the idea of introducing deadlines was to accompany some form of punishment and discipline to ensure that implementation was within schedule. It was this failure to set a specified timeframe that influenced implementation so much that nine years down the line student's safety was still a thorny issue due to failure by the schools to implement the policy.

4.3.2 Quality Assurance and Standards Officers (QUASO) views on factors influencing safety policy implementation

The QUASO enumerated five major factors that influenced safety policy implementation as availability of funds and its management, assessment, monitoring and evaluation, school community attitudes, timeline and training in safety matters that facilitates knowledge acquisition in safety policy implementation.

4.3.2.1 Availability of funds and its management

The QUASO acknowledge that safety policy implementation requires money and all kinds of expertise and skills to carry out successful implementation, it was evidently essential that managerial and supervisory personnel needed in- service training program to strengthen and update them with new procedures in financial management. The training could be particularly useful in introducing administrative reforms, innovative management and supervisory techniques to facilitate safety policy implementation. Failure to use Monitoring and Evaluation tools and lack of its knowledge and practice

necessitates training. The course in Monitoring and Evaluation is meant to improve the overall capacity for efficiency project management and implementation through the application of Monitoring and Evaluation techniques, Head teachers should make financial returns and accounting regarding funds in their institutions. Teachers' monetary motivation in Kenya has been in the public domain while teachers could be key players in the successful safety policy implementation. This study revealed that lack of monetary motivation was a contributory factor for teachers' laxity to participate in safety policy implementation. Teachers are well placed to sabotage or harmonize activities in this case on safety policy implementation. Implementation process not only called for investment and expenditure but also for attitudinal and institutional change. Head teachers are charged with the responsibility of changing attitudes of the collaborative groups creating awareness which certainly create understanding to work in collaboration. This study established that it is the Head teacher's duty to change teacher's expectation and bring them on board through cordial understanding and be part of the implementation team.

4.3.2.2 Monitoring and Evaluation

Monitoring and Evaluation (M & E) enables one to assess the quality and impact of work against action plans and strategic plans. The findings of this study revealed that M & E was rarely done and where it was done, results were not used to improve the situation. In that case the QUASO commitment to the implementation of safety policy posed more questions than answers, M & E emphasis is first put in its attention on the indicators of implementation progress. M & E at later stage shifts to outputs and impact, thus implying that the importance of indicators could be changed during project implementation. M & E enables policy makers to identify safety needs of a school such

as availability and adequacy of funds, skilled manpower materials and the processes for implementation as important part in the policy implementation. Safety policy is about life hence the importance of putting the necessary mechanism like skilled and committed manpower in place to ensure satisfactory implementation. It was that lack of M & E which led to failure in identifying inadequacies in input review of the process and making of summative statements about the outcome regarding safety policy implementation while there was an emerging concern that the formulation of safety policy did not make any differences in students' safety. This study established that of M & E failed the implementation process. This study further revealed that students still die in school dormitories. Classrooms and dormitories are congested, property worth millions lost through arsons and invasions were evident. This means policy implementation has not been achieved.

4.3.2.3 School community attitude

The success of safety implementation depends on willingness of all members of the society who should be knowledgeable in safety policy matters. To this end workshops and seminars involving professional quest speakers to facilitate faster acquisition of knowledge was most needed. This study's findings established that training for QUASO was insufficient hence ineffective guidelines in M & E influenced implementation. However, majority of the schools were not involved in school community partnership hence frequent theft cases, invasion and arson experienced in schools from locals. Patterns and trends of education financing in Kenya incorporate a partnership comprising of the state, individuals and communities. The school community partnership plays an important role in providing financial, physical facilities in human and material resources

to schools. In essence building partnership create a supportive environment for promoting safety policy implementation which help in harmonizing activities and mobilizing additional and human resources where need be. On the other hand this study's findings revealed that the local community frustrated the implementation efforts. This was evident where locals were on record for cutting the school fences and sneaking into the compound at night to steal. The local community took advantage of weak fencing structures and the security personnel to frustrate the implementation efforts. School community attitude towards safety policy plays an important role in the successful implementation of the safety policy.

4.3.2.4 Timeline

The QUASO cited lack of substantive timeline within which safety policy implementation was to be completed. Even though the Ministry of Education issued the safety policy guideline, it fails to specify the time frame for implementation. Consequently, schools have not fully implemented the policy because they cannot be punished for failing to implement. The QUASO also don't have express powers to force the schools to implement the safety policy because the safety policy process is a costly exercise. The QUASO admitted as revealed by this study that full implementation of safety policy is almost impossible without putting in place timelines.

4.3.2.5 Training in safety matters

The successful safety policy implementation depends on training in safety matters which facilitates knowledge acquisition in safety policy implementation process. The QUASO cited lack of knowledge in safety matters brought about by lack of training. The study revealed that successful use of fire fighting equipments need adequate knowledge on the

use of the equipments. Fire fighting requires knowledge acquired from fire drills and administering of First Aid. It is for this reason that the QUASO mentioned lack of training in safety matters as a factor influencing the implementation process.

Both convergent and divergent issues emerged on factors influencing safety policy implementation among respondents in this study. This study's findings revealed that most of the factors identified as influencing safety policy were convergence, however, the strength given to each factor varied from respondent to respondent. Reasons attributed to the factors cited were divergent and that Head teachers were defensive and finger pointing. This therefore means that factors not cited by Head teachers were about perception and the implication on their management responsibility. This study noted the importance of M & E of the policy implementation as that of determining success or failure on the strength that availability of resources facilitates successful implementation. The current study also noted that knowledge in fire fighting equipments was essential for their successful use. The current study focused on financial availability as a factor influencing safety policy implementation in public secondary schools in Kericho West District and it revealed that insufficient resources was a stamp ling block to expansion and improvement of safety in schools. The study also revealed that lack of sufficient fund influence successful safety policy implementation in public secondary schools in Kericho West District. The current study further revealed that insufficient financial management and outdated procedures influenced implementation of safety policy in public secondary schools in Kericho West District. Head teachers and local Community partnerships positively influenced implementation in terms of physical, financial and material support; the current study did not find any partnership that influenced safety policy

implementation in any form. The study established that political goodwill was realized in the provision of school buildings on individual level. The current study's findings established that political goodwill was exhibited through CDF.

4.4 Possible solutions to the challenges affecting the implementation process

To address the third objective which seeks possible solutions to the challenges affecting the implementation process the researcher sought for the views of the Head teachers and the Quality Assurance and Standards Officer. The suggested possible solutions can either be achieved in the short run or in the long run depending on the cost of implementation.

4.4.1 Head teachers' views on the possible solutions to the challenges affecting the implementation process

Head teachers cited sourcing of funds, training teachers and students, creating awareness, adherence to government policy, community awareness, Architectural design, proper fencing, environmental design and design of assembly points, as the possible solutions to the challenges affecting the implementation process as shown in figure 4.2.

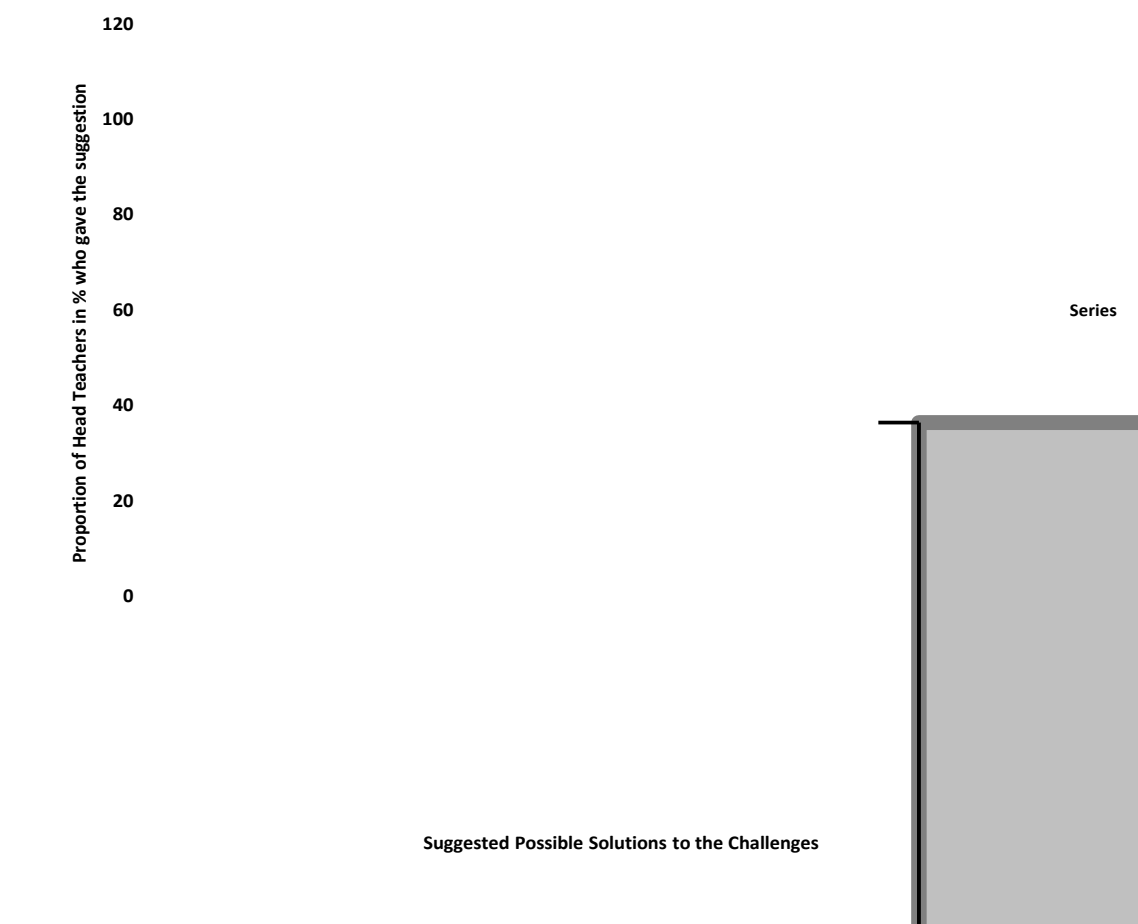


Figure 4.2: Head teachers' views on the possible solutions to challenges affecting implementation process

Figure 4.2 Presents results on the Head teachers views on the possible solutions to the challenges affecting the implementation process. The factors were cited as follows: Nine (100%) of the Head teachers cited sourcing of funds and training to both teachers and students, Eight (89%) cited adherence to government policy, seven (78%) cited community support, six (68%) cited Architectural design, Four (44%) cited proper fencing, Three (33%) cited Environmental design and Two (22%) cited design of

assembly points as possible solutions to the challenges affecting the safety policy implementation process.

4.4.1.1 Sourcing of funds

This study revealed that the biggest challenge to the successful implementation of the safety policy in public secondary schools in Kericho West District is lack of funds. Safety policy implementation was a costly exercise that involved renovation, relocation, construction and purchase of costly equipments such as fire fighting equipments. Availability of funds facilitates faster implementation of the safety policy while lack of it badly affects the process. Nine (100%) of the sampled Head teachers cited sourcing of funds from the government, donors and other financiers as the best possible solutions to the challenges of implementation of safety policies in the public Secondary schools, since schools are unable to raise the required funds for the successful implementation. Other stakeholders should also step in to finance the process and make schools safe. Monitoring and Evaluation enables one to assess the quality and impact of work against action plan and strategic plan. This study's findings revealed that Monitoring and Evaluation was rarely done due to lack of funds. Monitoring and Evaluation emphasis is first on putting its attention on the indication of implementation process. Commitment of Head teachers to the implementation of safety policy is affected by lack of funds. Funds should be sourced to enable them implement the safety policy successfully.

4.4.1.2 Training of personnel

Knowledge on safety policy and on the use of fire fighting equipments is necessary for successful implementation of safety policy. This study revealed that most Head teachers and students don't have adequate knowledge on safety policy and the use of equipments.

Nine (100%) of the sampled Head teachers cited the need to train Teachers and students on safety policy to create awareness on the use of fire fighting equipments. The Head teachers further revealed that there was need for the government to start training through workshops and seminars on the same to sensitize all the stakeholders. This exercise requires a lot of money for it to be successful.

4.4.1.3 Adherence to government policy

Timeframe within which to implement government policy is important as a way of keeping the concern parties alive to the need to act. This study established that there was no specified timeframe within which the safety policy should be implemented. This was because of the cost and the fact that implementation of safety policy was an ongoing process. Eight (89%) of the Head teachers sampled suggested that for the successful and quick implementation of safety policies the government should come up with timelines and introduce some form of punishment to ensure that the implementation process was within schedule. This will lead to strict adherence to the government policy guidelines.

4.4.1.4 Community awareness

Local community input in the implementation of safety policy is very important. Seven (78%) of the Head teachers suggested that local Community should be involved and made aware on the safety policy needs in the school. This study revealed that the local community frustrates the implementation efforts as evident where locals cut the school fence and when they sneaked at night to the dormitories and steal taking advantage of weak fencing system. Head teachers suggested that local community should be made part and parcel of the school process so as to change their attitude and create awareness since they play an important role in the successful implementation of the safety policy.

4.4.1.5 Architectural designs

Engaging qualified architectures in school buildings is important. This study's findings revealed that schools a times don't involve professionals in school buildings and design. This therefore means that some of the buildings are substandard and therefore risky to the students and other users. Six (68%) of the sampled head teacher suggested that all school buildings should be designed and build by qualified professionals for the buildings to meet the set standards and be safe to the users. They also mentioned the need for regular inspections by the Ministry of Works to ascertain suitability of the buildings.

4.4.1.6 Proper fencing

This study's findings also found out that most schools have weak fencing system. This was evidenced where locals sneaked into schools to steal or even set ablaze dormitories. Weak fencing structures frustrate safety policy implementation efforts. Four (44%) of the sampled Head teachers suggested that proper fencing and general security system be enhanced in schools for the successful implementation of safety policy. Local community should also be involved to give support when need arise by providing security and financial support in order to have the right fencing system in place.

4.4.1.7 Environmental design

Environmental designs were also cited as a solution to the challenges affecting the implementation process. Three (33%) of the Head teachers suggested that environmental experts be involved in the citing of buildings in schools. This will enable building to be located in the right place in relation to other buildings in the school compound. Environmental impact assessment should also be done. This study further revealed that most of the buildings were not compliant because the environmental designs were not done.

4.4.1.8 Design of Assembly point

Finally, two (22%) of the Head teachers suggested that assembly points should be design in the school for easy identification of victims in case of fire out break and other emergencies. The study revealed there were no fire points in the schools.

4.4.2 Quality Assurance and Standards Officers views on the possible solutions to the challenges affecting the implementation process

The QUASO cited five possible solutions to the challenges affecting the implementation process as outsourcing for funds, training of personnel, community awareness, adherence to government policy and regular assessment.

4.4.2.1 Outsourcing of funds

The QUASO cited outsourcing of funds from the government, parents, well wishes and even foreign donors as a possible solution to the challenges facing the implementation process. The study revealed that the biggest challenge to the implementation of the safety policy is lack of funds. The commitment of QUASO to the implementation process is affected by lack of funds.

4.4.2.2 Training of personnel

The QUASO cited the training of personnel both in the school and in the community in areas like First Aid, use of fire fighting equipments and on safety policy in general as a possible solution to the challenges. This can be done through seminars and workshops in order to equip members of the school community and the neighbourhood with knowledge on safety policy and how to deal with emergencies.

4.2.3. Community awareness

For the safety policy implementation to be successful all stakeholders should be involved in the implementation process. The QUASO cited creating awareness among the

members of the community in the school neighbourhood will help solve some of the challenges affecting the implementation process. The study revealed that the local community can frustrate the implementation efforts by, for example, cutting the school fence and sneaking into the school compound to steal. The QUASO feels that the school community attitude towards safety policy implementation success is very necessary

4.4.2.4. Adherence to government policy

The QUASO cited failure by the head teachers to act as per the government directive as one of the reasons for non compliance to the safety policy implementation. This study revealed that most of the government policies are ignored at the implementation stage. The QUASO suggested that timelines should be introduced and a form of punishment should also be introduced so that all government policies are adhered to within a specified period of time.

4.4.2.5. Regular assessment

The study further revealed that safety policy implementation has not been successful because of failure on the part of the Ministry of Education to carry out regular assessment on the implementation process. The QUASO cited regular assessment of schools as one of the possible solutions to the challenges affecting the implementation process. Regular assessment enables QUASO to see the impact and quality of work against what was planned. The study findings revealed that M & E are rarely done so QUASO commitment to the implementation is questionable; however the QUASO cited lack of funds as the reason why regular assessment is not conducted.

4.5 Discussion of findings

The implementation of safety policy was to a large extent satisfactory in most of the public secondary schools in Kericho West District. However, the requirement that Head teachers reside in school was 100% implemented. Provision of housing for the Head teachers had been done in all schools. From 2005, there was an attempt to conduct fire drills and this reflect a change in perception of head teachers towards fire safety and preparedness since the significance of fire drills in school setup should never be downplayed. According to Comolotti (1999) school fire drills prepare students for what they need to know in case of fire outbreak. It also enables students and teachers to plan their escape in advance and to address learners' safety issues.

Students spend a considerable length of time in dormitories and classrooms. These buildings should therefore, be put up according to policy specification in order to avoid situation that would compromise the safety of the occupants. Eighty nine per cent of the school had dormitories with double doors opening outwards to allow for the free flow of movement in case of emergencies. Dormitories are also required to be fitted with emergency doors. The findings showed that the implementation of this policy had been achieved in majority of schools. Emergency exits are essential in dormitories, laboratories and other special rooms as they provide alternative escape routes during emergency. The high level of the implementation of this policy in some schools is commendable and should be followed by others in order to enhance the overall safety of schools.

The policy guideline requirement that qualified professionals be used in site planning, construction and maintenance of school buildings is to ensure that the buildings are safe to the learners and other facility users. In the recent past, Kenya has witnessed an increasing number of buildings collapsing due to poor workmanship by unqualified constructors. To avoid the occurrence of such incidences in schools, the one head teacher who was found to have contravened this requirement should in future engaged qualified and registered professionals in the construction and maintenance of school structures. The posting of safety instructions in three schools is an indication that safety is taken seriously in these schools. Special rooms like laboratories and workshops should each have First Aid kits. According to Red Cross Society (2008), a First Aid kit is a set of medicines and equipments for providing basic treatment in emergencies. First Aid kits are essential in routine daily life as there are chances for accidents to occur when people least expect them. It is advisable to have First Aid kits in schools to be used when circumstances require them. A First Aid kit can make the difference between life and death especially before proper medical attention is obtained. Availability of First Aid kits shows that a school is prepared for emergencies.

Five schools in Kericho West District had fire extinguishers and these raise the serious issue of fire safety preparedness of public secondary schools in the district. Having fire equipments and training of staff on how to use them is one precaution against fire related disasters. These findings agreed with those of Gikandi, Ogutu and Obwocha (2006) who reported that some schools had installed fire fighting equipments at strategic points like Dormitories, Classrooms, Laboratories and other special rooms. This provision of fire equipments in most schools is a step in the right direction; however, there is need to keep

them serviceable. Makabila, Ayodo and Ringa (2006) found out that majority of boarding schools have old fire equipments which had not been serviced for long and this put doubt to their usefulness in case of fire outbreak.

School buildings should be painted regularly since painting has both aesthetic as well as public health values. Buildings that are newly painted looks neat and habitable whereas buildings that have tarnished, peeling and fading paints looks dilapidated and unhygienic, creating a bad impression about the school and its management. Compared to other policy guidelines, it appears insignificant. However, Lady (2009) points out that painting and whitewashing, apart from being effective anti-microbial are effective and cheap ways to renovate school buildings. School safety policies require that premises and students be inspected at least once a year. Four schools had been inspected in the past one year preceding this study. This is commendable. However 5 schools had not been inspected. Head teachers of schools that have not been inspected should invite officers from the District Quality Assurance and Standards office to conduct inspections. Inspection reports are useful starting point for school safety needs and assessments. Ahinduka (2005), in a study conducted in Kisumu Municipality, similarly found out that a majority of schools were inspected at least once every year. The findings provide evidence that a significant number of schools are inspected each year, but a few go uninspected. The failure to inspect some of the schools may impact negatively on safety and security matters in such schools.

Overcrowding was a major problem in public secondary school classes as well as dormitories. This poses serious public health and safety risks. Crowding was found to be a major cause of death due to stampedes in fire incidents (Odalo, 2001 and Siringi, 2001).

The unprocedural conversion of structures meant for other uses into dormitories was also noted. School authorities should peg admission to bed space to avoid the risks associated with overcrowding. Classrooms should be built in such a way that the longer sides with windows run in an east to west direction to avoid exposing the learners to the sun's harmful radiation and glare in the mornings and late afternoons. Four schools posed danger to learners for failing to comply with this policy. The sources of school water are important aspects of school safety and health. One of the greatest determinants of school health is the type of water consumed by the students, teachers and support staff in a school. All the schools had taken care to provide at least one safe source of water. These included water from main supplies, roof catchments and protected boreholes.

Schools should ensure that the sources of water are at least 15 meters away from pit latrines to avoid outbreaks of water borne diseases. Water and sanitation are very important aspects of school safety and health. It is therefore incumbent upon school heads to ensure that water is safe for use by students. Five schools had no proper gates or fences. Perimeter fence, security and safety in schools should always remain on the agenda of schools due to its sensitive nature. Head teachers have a basic responsibility to safely guard children under their care during school hours and at night. This cannot take place when schools have no fences or have weak and inadequate fences prone to intrusion. At night, the school needs to lock down gates to deter acts of vandalism, theft, or arson. While fences are not 100% tamper proof, they define the extent of the school plant and act as a deterrent to intruders. A strong fence is symbolic of a safe and secure school.

Inadequate funds were by far the most significant factor influencing the implementation of safety policy. The head teachers (100 %) and the QUASO stated it as influencing the implementation of safety policy which involves extensive modification of existing buildings, the purchase of expensive safety equipments and fittings and capacity development at all levels. Without adequate funds, all the safety policies may not be implemented at once. Head teachers were found to play a significant role in the implementation of safety policy. As the heads of their institutions, the responsibility of the actual implementation rested on their shoulders. As being in *locos parentis* they had to ensure that the schools were made safe for the learners. QUASO were found to play an advisory and supervisory role in the implementation of safety policies. They were the main link between the Ministry of Education, schools and all the stakeholders. Without their input, implementation of safety policy in schools would be haphazard and uncoordinated. The overall safety attitude scores for both head teachers and QUASO were found to be above average. A positive attitude towards the implementation of safety policy was found to be an important requirement for the success of the whole exercise.

Most of the head teachers (89%) cited regular evaluation of the school plant to determine safety needs as a strategy for enhancing the implementation of safety policies. This was done through regular checks and internal inspection of school buildings and students. Conducting regular fire and emergency drills was only stated by two head teachers as a strategy for enhancing the implementation of safety policies. Regular drills prepare students for what they need to know in case of a fire or any other school emergencies. They also allow students to plan their escape in advance. The purchase of safety devices

and the retention of a trained nurse in the school equip the school to handle fire and medical emergencies should they arise. QUASO provide supervisory and advisory roles to head teachers on issues of school safety and security among other things. Any strategy they devise to enhance the implementation of safety policy must be realistic, achievable and acceptable to stake holders. Otherwise such strategies would fail. The strategies must also fall within the legal framework of the Department of Quality Assurance and Standards. Training helps to build capacity since there will be new working procedures or new equipment from time to time, and again training will reduce the risk of safety offences, negligence or unreliability.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings and conclusion drawn from the findings of the study based on stated research objections. The chapter further made recommendation for policy and suggestion for further research.

5.2 Summary of findings

This study was design to assess the extent to which safety policies have been implemented in public secondary schools in Kericho West District and the study findings established that the state of safety policy implementation in the schools was on overall partially implemented as per the policy guideline except for the requirement that the head teachers reside in school which is a 100% implemented. The study further established that full implementation of the safety policy may not be attained due to the fact that implementation is a continuous rather than a terminal process. So, the other entire policy guideline requirements are at different levels of implementation.

The study further established that the unsatisfactory implementation of safety policies in the public secondary schools in Kericho West district was attributed to a variety of factors which influence the implementation process. Respondent's views showed that 100% of the respondent cited financial resources, 89% cited regular assessment, 78% cited knowledge in safety and the same number cited attitude towards safety policy, 67% cited use of specialists, 56% cited political goodwill and 44% timeframe. Full implementation will only be realized if the above cited factors influencing the implementation process are addressed.

The study also established from respondents views that the following are possible solutions to the challenges affecting the implementation process. 100% of the respondents cited outsourcing of funds, 100% cited training of personnel, 78% cited creating awareness in the community, 89% cited adherence to government policy, 68% cite architectural design, 33% cited environmental design and 22% cited design of assembling points.

5.3 Conclusions

Based on the research findings of the study and guided by the research questions of the study the researcher concluded that the first objective which sought to established the extent to which safety policy implementation in public secondary schools in Kericho West District was partially implemented. All the requirements in the safety policy guideline are at different levels of implementation except for the requirement that head teachers reside in schools which is fully implemented. This has the implication that the schools are not very secure for the learners and other users.

The second research objective was to establish factors influencing safety policy implementation in public secondary schools, from the study the researcher concludes that financial resources and management, regular assessment, monitoring and evaluation knowledge in safety policies, use of specialist, school community attitude, time frame and training in safety matters highly influenced safety policy implementation in public secondary schools in Kericho West District.

On the third research objective which sought for possible solutions to the challenges affecting the implementation process the study concluded that sourcing of funds from government, donors and other financiers, training of personnel adherence to government

policies, community awareness architectural design, proper fencing, environmental design, design of assembling points and regular assessments are highly cited as possible solutions to the challenges affecting the implementation process.

5.4 Recommendations

Based on the findings and the conclusion of the study, the following recommendations are made:

- i. The Ministry of Education and other stakeholders should put in place a collaborative approach to the implementation of safety policies and formulate a more elaborate policy to address student's safety in the public secondary schools, since the current safety policy is too generalized to address specific safety needs of students in the school.
- ii. The ministry of Education should review its inputs necessary for safety policy implementation in terms of budgetary allocation and skilled human resources in monitoring and evaluation to adequately cover safety policy implementation since the resources available for safety policy implementation are presently not adequate.
- iii. The schools outsource for funds to facilitate for the construction of perimeter walls, training of staff and students in First Aid, training of members of the school community on how to fight fire using fire fighting equipments and to change students attitudes to assist them to foster and maintain a safe learning environment in order to enhance security in the school

5.5 Suggestions for further research

In light of the study's findings further research needs to be done on the following areas:

- (i) The Head teacher's attitudes towards adherence to government policy and implementation of educational policies in public Secondary schools.
- (ii) The multiple challenges facing Kenyan students in their pursuit of education in public secondary schools.

REFERENCES

- Achola, P.W. and Pillai V.(2000).*Challenges of Primary School Education in Developing Countries: Insights from Kenya*, Ashgate aldershot.
- Akombo,R. (2004). School fires and lack of safety codes Kenya Times, June 29th,2004.
- Akali, (2009). *Fire sources, disaster impacts and medication in Kenyan secondary schools*. Proceedings of a workshop on institutional fire risk reduction, 25th June Masinde Muliro University of Science and Technology Kakamega, Kenya.
- Alberta Learning Special Education Board(1999),*School Climate, in supporting safe, secure and caring Schools in Alberta*, Edmonton.
- Anderson, J.E. (1975). *Public policy making*. London: Nelson.
- Bachrach,P.and Baratz,M.S.(1962). *Two faces of power*. American Political Science Review.
- Bwire, B.& Ngumbao, K, (2004). *Rising from the ashes*. Daily Nation: 12th July 2004, pg.12.retreived on june 25, 2011
- Canter, D,Ed.(1980) *Fire and human behaviour*. Chichester: Wiley Publishers.
- Cavanagh, S. (2004). *Schools abroad brace against terrorism Education Week*; 6th October, (2004). Who is to blame for school deaths? Available. www.edu.cn
- Cornacchia,H.J, and Olsen, L.k.(1984).*Health in Elementary Schools*. St. Louis : Times Mirror.
- Cunningham, W.C&Taylor.T.H(1985). *Private security and Police in America*. The Hallorest report, Portland: Chancellor Press.
- Daily Nation (1998). *Could it have been averted?* Daily Nation, 28th March 1998.p.6
Retrieved on June 25th 2011
- Daily Nation (2001). *This tragedy did not have to happen*. Daily Nation, 15th March 2001, pg6. Retrieved on may 26th 2011
- Daily Nation (2001). *Who is looking after our school children?* Daily Nation, 27th March 2001,pg.6. Retrieved on June 25th 2011
- East African Standard, (2004). *Safe water call for Schools*. East African Standard, 20th July 2004, pg 15. Retrieved on May 20th 2010
- Eliseev,(2003). Desperate measures. www.suntimes.co.za
- Gren, G. & Fisher,R.J. (1987)*Introduction to security*. Boston: Butterworth.

- Gicheru,C.(1998). *These disasters can be averted*. Daily Nation 28th March 1998, pg 2.2 Retrieved on April 25th 2012
- Gun Control Alliance (2000). *Firearms free schools*. www.gca.org.za.
- Hogwood,B.W.& Gunn, L.A. (1991). *Policy analysis for the real world*, Oxford: University Press.
- International Save the Children Alliance (2005). *Practice Standards in Children's participation*. Save the Children (UK).
- Kanthuri, N.J & Pals, A.D (1993). *Introduction to Educational Research*. Njoro, Kenya: Education Media Centre, Egerton University
- Kasumba,M.(2004).*How war on swine fever was executed*. East Africa Standard, 14th July 2004, pp.12-13. Retrieved on June 29th 2010
- Kay, J. (2003). *Teachers Guide to protecting Children*, London: Continuum.
- Kilander,H.F. (1972) *School Health Education ;A study of Content Methods and Materials*. New York. Macmilla Co.
- Kerlinger, F. N. (1964). *Foundations of Behavioural Research: Educational and psychological Inquiry*. New York: Holt,Rinehart and Winston.
- Kombo,D.K & Tromp,D.L (2006). *Proposal and Thesis writing An Introduction*. Nairobi: Pauline Publication.
- Kothari,R.C(ED) (2008). *Research Methodology, Methods and Techniques*_New Dellhi: New International Ltd.
- Lulua,L, (2008). Addressing school safety and facility specification a paper presented during the National induction course in Educational Management for deputy head teacher and senior Masters of secondary schools in Kenya at Narok Teachers Training College.
- Marshall,J&Peters,M.(1999).*Educational Policy*. Cheltenham: Edward Elger Publishing.
- Ministry of Education (1999). *School Action for better Health (PSABH)*, Nairobi.
- Ministry of Education (2001). *Health and Safety Standards in Educational Institutions*. (Circular Ref. No. G9/1/169).
- Ministry of Education (2005). Kenya Education Sector Support Programme (KESSP) 2005-2010 Nairobi.
- Mugenda, O.M & Mugenda,A.G (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts press.

- Muriuki,M.(2004). *A Village Mourns*. Daily Nation, 15th March 2001, pg.1
Retrieved on June 25th 2011
- Mutai,K.B.(2000).*How to write Quality Research Proposal: Complete Simplified Recipe*.
New Delhi: Thelley Publications.
- Mwaniki, M. (1999). *Prefects die in school fire*. Daily Nation, 20th May 1999, pg.1
Retrieved on May 15th 2011
- Mzungu M. (2008). *School fires, death but real culprits at large*. The Sunday standard
May 26th Page 39. Retrieved on January 2nd 2011
- Nabris K. (2002). *Civil society and empowerment monitoring and evaluation*, Palestine,
Passia.
- Nyakundi, E. (2004). *Tears as village buries four pupils killed by lightning*. The
standard, 1st December 2004, pg, 4, Retrieved on June 25th 2011
- Odaló, B. (2001). *Sixty eight dead*. Daily Nation, 28th March 2001, pg.1
Retrieved on June 20th 2010
- Oduogi, M.(1997). *Improving administrative inputs for public policy making in Kenya*.
Published M. Thesis, Institute of Social Studies. The Haque,Netherlands.
- Oduor, A & Atsiaya, p. (2004). *Two fire attacks fail to break school's spirit* East African
standard, 15th July 2004, pg 4,(Schools & career). Retrieved on June 25th 2011
- Orodho J A (2010). *Technique of writing research proposal and reports in education and*
social Sciences, Nairobi: Masola publishers.
- Oriang',l.(2001). Taking charge of the welfare of our children. Daily Nation, 27th
March 2001, pg.5 Retrieved on May 11th 2011
- OECD (2004). *Programmes on education buildings: Geo - Hazards International*.
Available on - line www.oecd.org. Retrieved on August 16th 2010
- Pauls,J.L. (1980). *Building Evacuation: Research and recommendations* in D.Canter
(Ed). *Fires and Human behavior*, Chichester: Wiley.Pg.251-276
- Redican,K. and Olsen L. (1993). *Organisation of School health Programmes* , Madison:
Brown & Benchmark,
- Republic of Kenya (1980). *The Education Act*. (Cap 211) Laws of Kenya. Nairobi:
Government Printer.
- Republic of Kenya (1986). *The public Health Act*. (Cap 242) Laws of Kenya. Nairobi:
Government printer.

- Republic of Kenya (1987). *The Ministry of Education Manual for Heads Secondary Schools*, Revised Edition. Nairobi: Government Printer.
- Republic of Kenya (1996). *Ministry of education Circular No. R/MMMCC/L Vol. II/28*.
- Republic of Kenya (1998). *The local Government Act* (Cap 242 Laws of Kenya). Nairobi; Government printer.
- Republic of Kenya (1999). *The report on the Totally Integrated Quality Education and Training (TIQET)*. Nairobi: Government Printer.
- Republic of Kenya (1999). *Ministry of Education Circular No. G9/1/169 Vol III/138 of 14th October 1999*.
- Republic of Kenya (2001). *Ministry of Education Circular No. G9/1/169 of 10th April 2001*
- Republic of Kenya (2003). *Legal Notice. No.131 of 2003*. Nairobi: Government Printer.
- Republic of Kenya (2004). *Transportation of people Lorries and pick - ups*. Daily Nation, 2nd August 2004, pg.16.
- Republic of Kenya (2005). *Sessional paper No.1 of 2005 on Policy Framework for Education, Training and Research*.
- Republic of Kenya (2006). *National Early Childhood Development Policy*.
- Republic of Kenya (2006). *Early Childhood Development Service Standard Guideline for Kenya*.
- Republic of Kenya (2008). *The safety standards manual for schools in Kenya*, Nairobi: Church world Service.
- Reuters (2004). *Indian school fire kills 90 children*. *www.Reuters.com*. Retrieved on June 25th 2011
- Savula, A & Atsiaya, p. (2004). *Grilles order to school heads*. The Standard, 29th March 2004, p.4.
- Simes, J.D. (1983). *Affiliative behavior during escape to building exits*. Journal of Environmental Psychology, Vol .1. March 1983.
- Siringi, S. (2004). *Is there resource in Law for parents?* Daily Nation 27th March 2004, pg.5 Retrieved on June 25th 2011
- Soomoren, p (2002). *Preventing of crime in and around high schools*. Melbourne, Australia.
- USDE (2004). *Annual report on school safety*. Available on - line: www.edu.gov. Retrieved on July 26th 2011

- UNESCO.(1996). *Educational building and equipments*. Paris :UNESCO.
- UNESCO (2005). *Challenges of implementing Free Primary Education in Kenya*. Assessment report, UNESCO, Kenya.
- UNESCO (2006). *Fact Book on Education for all (EFA) 2006*, UNESCO, Nairobi.
- UNESCO (2006). *Strong Foundation; Early Childhood Education and Care*. UNESCO, Paris.
- Wamahiu,M. (2004). *Ban on caning blamed for schools unrest*. www.corphn.org.
Retrieved on July 26th 2011
- Wood,P.G(1972). *The behavior of people in fires*. Borehamwood Fire Research Station. Great Britain.
- Zicherman,J.,(Ed, (1992). *Fire safety in tall buildings*. (Council on tall buildings and urban habitats series). New York: McGraw Hill.

APPENDICES**APPENDIX 1: BUDGET**

<u>ITEM</u>	<u>COST (KSH)</u>
Travelling and subsistence	15000
Stationery	20000
Secretarial services	5000
Telephone	5000
Publication/binding	8000
Photocopying services	15000
Data analysis	5000
Miscellaneous	<u>10000</u>
TOTAL	<u>83000</u>

**APPENDIX II: INTRODUCTORY LETTER TO THE HEADTEACHERS
KIPLANGAT TITUS KITUR,**

P.O BOX 1579,

KERICHO.

Dear sir /madam,

RE: INTRODUCTORY LETTER.

I am a Master of Philosophy student in the Department of Educational Management and Policy Studies at Moi University. I am doing research on Assessment on Safety Standards in Public Secondary Schools in Kericho West District and your school has been chosen to help the researcher achieve the objectives of the study.

The research will involve questionnaire for the Head teacher and observation of facts on the school. I assure you that the findings will purposely be used for the research and all information received will be treated with confidentiality and anonymity.

Looking forward to your co-operation.

Yours faithfully,

KIPLANGAT TITUS KITUR

EDU/PGES/4011/09

APPENDIX III: HEAD TEACHER'S QUESTIONNAIRE

The purpose of this study is to examine the implementation of safety policies in public secondary schools in Kericho West District. The information obtained will be treated with utmost confidentiality and only used for analytical purposes of the study. Please be as honest as possible in your responses.

PART A

1. Name of school: _____
2. Does your school have boarding facilities like hostels or dormitories? Yes (),
No ().
3. Indicate using a tick () the category of your school: Boy's (), Girl's (),
Mixed ()
4. Size of the school in hectares
5. Number of students in the school
6. Number of separate buildings
7. Number of teachers in the school

PART B

8. Number of subordinate staff.

Category	Number
Watchmen	
Nurses	
Matrons	
Gatekeepers	
Other support staff	

9. Do you reside in the school compound? Yes No

10. How many other teachers reside in the school?

11. How many fire drills have been conducted in the school since 2005?

12. How many teachers have been trained in emergency procedures?

13. State how many of the following fire safety devices are available in your school.

Indicate with an (X) where not available.

i. Fire alarm/detectors

ii. Fire hose reels

iii. Fire extinguishers

14. What other fire fighting devices are available in your school?

.....

15. State the number of bathrooms in the school.

16. State the number of toilets/water closets in the school?

17. How many first aid kits are available in the school?

18. How many times has the school been inspected in the last three years?

19. How many buildings are installed with lightning arrestors?

20. Do you involve registered architects, quantity surveyors and contractors in the design, construction and maintenance of school buildings? Yes No

21. Are classrooms situated upwind from laboratories, kitchens and playgrounds?

Yes () No ()

22. What is the source of school water?.....

.....

23. How do you ensure that school water is safe for consumption?.....

.....

24. Have cooks/matrons/nurses been medically examined within the year?

Yes (),No ()

25. What problems have you encountered in implementing safety policies in your school?

.....

.....

.....

.....

.....

.....

.....

.....

.....

What factors influence the implementation of safety policies in your school?

.....

.....

.....

.....

.....

.....

.....

27. Suggest possible solutions to the challenges affecting the implementation process in your school.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

The following are statements on the implementation of school safety policies on which your opinion is required. Please tick () to indicate whether you strongly agree (SA), agree (A), undecided (U), disagree (D), or strongly disagree (SD) with each statement.

1. School cannot afford to implement safety policies.

SA () A () U () D () SD ()

2. Implementation of safety policies in schools is not necessary.

SA () A () U () D () SD ()

3. School should source for funds to fully implement safety policies in schools. SA

() A () U () D () SD ()

4. Disaster management training should be made compulsory to all teachers.

SA () A () U () D () SD ()

5. Schools should conduct fire drills regularly.

SA () A () U () D () SD ()

6. Implementation of safety policies is important to both students and teachers. SA (

) A () U () D () SD ()

7. School disasters are inevitable even with safety systems in place.

SA () A () U () D () SD ()

8. Schools should prioritize implementation of safety policies.

SA () A () U () D () SD ()

9. It is impossible to implement safety policies even with adequate resources

SA () A () U () D () SD ()

10. There is no need to involve registered professionals in the design and construction of school buildings since local artisans can do the same at minimal costs.

SA () A () U () D () SD ()

Thank you for your co – operation.

Yours faithfully,

Kiplangat Titus Kitur.

APPENDIX IV: QUALITY ASSURANCE OFFICERS; INTERVIEW SCHEDULE

The purpose of this study is to examine the implementation of safety policies in public secondary schools in Kericho West District. The information obtained will be treated with utmost confidentiality and only used for analytical purpose of the research. Please be as honest as possible in your responses.

1. How regularly do you conduct physical inspection of school?

.....

.....

.....

.....

.....

.....

2. What problems do you encounter while doing physical inspection of schools?

.....

.....

.....

.....

.....

.....

3. What action do you normally take against schools which do not implement safety policies satisfactorily?

.....
.....
.....
.....
.....
.....
.....
.....
.....

4. What suggestions would you make to enhance the implementation of safety policies in secondary schools?

.....
.....
.....
.....
.....
.....
.....

5. What factors have promoted the enforcement of safety policies by inspectors?

.....
.....
.....
.....
.....
.....

6. What factors have hindered the enforcement of safety policies by inspectors?

.....
.....
.....
.....
.....
.....
.....

Thank you for your cooperation.

Yours faithfully,

Kiplangat Titus Kitur

APPENDIX V: OBSERVATION SCHEDULE

Name of school.....

1. Check for the existence of the following in Halls, dormitories, laboratories and Classrooms. Mark a () tick for compliance and (X) for non-compliance.

	Dormitories	Halls	Laboratories	Classes
i. First Aid kits				
ii. Window Grilles removed				
iii. Emergency exits				
iv. Firefighting equipment				
v. Double doors opening outwards				
vi. Safety instructions				
vii. Fire alarms/detectors				
viii. Stairs at both ends of storied buildings				

2. (i) Are fire-fighting equipments within easy reach? YES () NO ()

- (ii.) Are safety instructions prominently displayed? YES () NO ()

- (iii) Is the perimeter fence/gate adequate? YES () NO ()
- (iv) Is crowding evident in classes and dormitories? YES () NO ()
- (v) Do school building have lightning arrestors? YES () NO ()
- (vi) Do long sides of classrooms run in East-West directions? YES () NO ()
3. Comment on the general state of the school by stating whether the following aspects are satisfactorily (S) or unsatisfactorily (U).
- i. Sanitation and water facilities. S () U ()
- ii. Paintwork on buildings S () U ()
- iii. Masonry S () U ()
- iv. Roofing S () U ()
- v. Shutters/ window panes S () U ()
- vi. Food stores S () U ()
4. The presence or proximity of any hazards within the school compound like exposed electrical conductors, contaminators near food stores and tall trees near buildings.

.....

.....

.....

.....

5. Protective clothing for staff, for example overalls, dustcoats and boots for cleaners.

.....

.....

.....

.....

.....

6. Give visible evidence of safety policy failures in the school plants as a whole.

.....

.....

.....

.....

.....


.....

.....

.....

APPENDIX VI: RESEARCH AUTHORIZATION

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telegrams: "SCIENCETECH", Nairobi
Telephone: 254-020-241349, 2213102
254-020-310571, 2213123.
Fax: 254-020-2213215, 318245, 318249
When replying please quote

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

Our Ref: **NCST/RRI/12/1/SS-011/430** Date: **18th April, 2011**

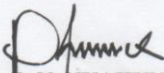
Titus Kitur Kiplangat
Moi University
P. O Box 3900
ELDORET

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "**Assessment of the implementation of safety policies in public secondary schools in Kericho West District, Kenya** " I am pleased to inform you that you have been authorized to undertake research **Kericho West District** for a period ending **30th June, 2011**.

You are advised to report to **the District Commissioner and the District Education Officer of Kericho West District** before embarking on the research project.

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


P. N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:

The District Commissioner
The District Education Officer

APPENDIX VII: RESEARCH PERMIT

PAGE 2

PAGE 3

THIS IS TO CERTIFY THAT:

Prof./Dr./Mr./Mrs./Miss..... TITUS KITUR
KIPLANGAT.....

of (Address) .. MOI UNIVERSITY BOX.....
3900 ELDORET.....

has been permitted to conduct research in

.....Location,
KERICHO WEST District,

.....RIFTVALLEY Province,
"ASSESSMENT OF THE

on the topic.....
IMPLEMENTATION OF SAFETY POLICIES

IN PUBLIC SECONDARY SCHOOLS IN.....
KERICHO WEST DISTRICT, KENYA."

.....
for a period ending 30TH JUNE, 2011.....

NCST/RRI/12/1/SS-011/430
Research Permit No.....
Date of issue..... 18/4/2011
Fee received..... KSHS.1000



Titus Kitur
Applicant's
Signature

[Signature]
Secretary
National Council for
Science and Technology

APPENDIX VIII: MAP OF THE STUDY AREA; KERICHO WEST DISTRICT

