

**FACTORS AFFECTING THE IMPLEMENTATION OF SAFETY MEASURES IN
SECONDARY SCHOOLS. A CASE OF KIKUYU DISTRICT, KIAMBU COUNTY**

BY

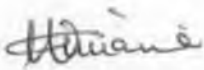
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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT FOR THE
AWARD OF MASTER OF ARTS DEGREE IN PROJECT PLANNING AND
MANAGEMENT, UNIVERSITY OF NAIROBI**


DECLARATION

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

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DEDICATION

This research report is dedicated to my late father, my mother and my children. To my mother, your love and encouragement has instilled in me values that have helped me go through life.

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First, I highly appreciate my Supervisor. Dr. John M. Wanjohi for his guidance in this project writing. I would also like to thank my lecturers who took me through the coursework in my studies that have equipped me with knowledge that I will apply for many years to come. I cannot forget to thank Dr Christopher Gakuu who taught me research methodology that has given me great insight in writing this research project. Your advice, constructive criticism and insight have gone a long way in making this document what it is. The University of Nairobi gave me the chance and space to study for which am most grateful. At the same time, I would like to thank my parents for ensuring that I got a good education. You had confidence in me and kept encouraging me to study on. To my friend J. Mungai, thanks for believing in me and encouraging me. I would also like to thank my colleagues in the project planning class. The many healthy discussions we had really helped.

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LIST OF ABBREVIATIONS

RCC	Reinforced Cement Concrete
USDE	United States Department of Education

ABSTRACT

Safety in schools is important for effective learning to take place. Safety is an integral and indispensable component of the teaching and learning process. There has been persistent recurrence of safety problems in secondary schools. This study seeks to assess the implementation of safety measures in secondary schools. This study is important because it is likely to make the stakeholders in the education sector formulate practical and realistic policies that will ensure that safety measures are put in place in secondary schools. The objectives of the study were to assess how the attitude of principals has influenced the implementation of safety measures in secondary schools, examine effects of training staff and students on implementation of safety measures, establish whether availability of funds influence the implementation of safety measures in schools and examine how the presence of safety measure policies influence their implementation. The study targeted Secondary Schools within Kikuyu District of Kiambu County. The study population was derived from among the school Principals and teachers. A descriptive survey design was used with a questionnaire as the main tool of data collection. The sample size was determined using stratified sampling method. The main instrument in the study was a questionnaire. The questionnaire included both open-ended and closed questions. Data collected was coded for confidentiality and analysed using Statistical Package for Social Sciences (SPSS). The study findings showed that the study noted that the principals had a positive impact on the implementation of safety measures in schools. The principals devised programmes and measure that the students and the teachers had to follow. It was evident that the teachers hardly had any training on implementation of safety measures. The study established that both the teachers and the principals cited that there was lack of funding and capacity that hindered safety measures implementation. The study concluded that training on safety measures was hardly offered, and of the few who had a chance indicated that it was not effective and adequate. It was evident that lack of funding and capacity hindered safety measures implementation. The study concluded that safety policies enhanced implementation of safety measures. It created a positive good environment for showing the students the importance of taking care and avoiding risks. The study thus recommended that principals must establish priorities for dealing with these issues and take account of health and safety. When communicating about safety with teacher and students, the communication preference will need to be concise, well thought out, in a logical sequence, and relate to their role. Secondly the researcher recommended that the secondary schools should have tools, initiatives and proper planning need to be in place in order for safety, convenience and mobility to be enhanced. Lastly the study recommended that The government and other stakeholders should provide adequate funding, since implementation of safety policies involves extensive modification of existing buildings, the purchase of expensive safety equipments and fittings and capacity development at all levels.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The term safe school has been defined by Donmez and Guven (2002) as places where students, teachers and staff feel physically, psychologically and emotionally free, and when enriched, school programs hone students' skills. Ogel, Tari and Eke (2005) have defined the term as places where positive relations exist between managers and teachers; teachers and students; students themselves; and school staff with each other and students.

Stephen (1995) stated that safe schools enabled teachers to teach and students to learn in a warm and favorable environment where there is no room for fear and threats, while Celik (2000) described them as organizations where learning and efficiency is important for everyone, and where students are expected to be successful and given space to display their social skills. Safe schools are places where teaching work is adopted as a policy, the school vision is clear, student and teacher expectations are valued, active cooperation from the environment is important, social activities abound, teachers and students are involved in management-decision making processes, student success is targeted, and a rich library and multipurpose sports facilities exist.

All over the world, cases have been reported of school children dying or getting injured in school violence, disasters and emergencies that would be avoided if safety measures were adhered to. In American and European schools incidences of gun and drug violence have been reported. E.g. the 2004 Beslan School massacre in Russia and the Chinese school blast and Indian school fires. Hundreds of school children have died in preventable incidents (Cavanagh, 2004; Soomeren, 2002 and Reuters, 2004). Knowledge about effective school safety practice has expanded considerably. New collections of exemplary, good or promising practices have been published (Shaw 2009). A number of countries have developed cross-sectional, national, regional or local strategies on implementing school safety. Some of these strategies are implemented within the broader context of national crime prevention policies. In the United States of America, various approaches are used in enhancing school safety . School wide practices are affected to systematically address needs of students, school personnel, the community and the physical plants of the school.

In the Netherlands School safety related work has focused on the safety of premises, school capacity building, and bullying and improved incidence response (Soomeren 2002). The Amsterdam school safety project is a 5 year project involving 40 secondary schools. It uses school safety plans, physical improvements to the school and curriculum and social supports to promote an integrative, preventive approach to school safety in participating schools. In India and China there has been concern over lack of implementation of school safety measures. Reuters (2004) in a report documenting the Indian school fire of July 2004 blames the tragedy, in which 90 children died, on failure to fully implement safety norms. The school building in this case was overcrowded and had only one exit. There were no emergency doors or fire fighting equipment. 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.

In Australia, both commonwealth and state initiatives have addressed school safety issues. A comprehensive review of school based and policies have been undertaken, innovative and restorative approaches that deal with safety in schools has been piloted in Queensland and the Australian capital territory (Shaw, 2002).

In a research paper addressing school safety in Uganda, Lulua (2008) states that development partners like the national government, district government, communities, parents and private sector partners have tried to respond to the infrastructural aspects of educational quality, but safety of the learning environment has not been adequately addressed. 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. Uganda has implemented the safe schools contract (S.S.C) as one of the identified interventions which strengthens the roles of teachers, pupils, parents and their involvement in children's education to enhance quality learning.

In Kenya, the 1991 raid by boys on the girls' dormitory at St. Kizito Secondary School in Meru resulted in the death of 19 girls (Simatwa, 2007). The existence of policy guidelines on school safety has not stopped the incidences of injury, death and loss of property in Kenyan public schools. Most schools were found not to have complied with safety policies. The schools were ordered to remove grilles from dormitory windows to protect students during

disasters. It was recommended that school managers should beef up security by employing an adequate number of watchmen.

School safety policies in Kenya as indicated in the Ministry of Education Circular No. G9/1/169 (Republic of Kenya, 2001) includes requirements that: Head teachers should reside in schools; Fire drills should be held at least twice every year; Emergency doors should be created in dormitories and special rooms; Safety instructions should be prominently displayed in laboratories and workshops; Dormitory windows should open outwards and be without grilles; Dormitories should have double doors opening outwards; Fire fighting equipment should be provided; Regular painting and white washing of buildings; Involvement of registered professionals in site planning, design, construction and maintenance of school buildings; Regular health inspection of premises and students; Prevention of overcrowding in classrooms and dormitories; Classrooms should be built upwind from laboratories, kitchens and play grounds and their longer sides to run in an east to west direction; One toilet to be provided for every thirty students and wholesome water be provided for consumption by students and clearly demarcated school grounds with proper fencing and secure gates. In view of the foregoing there was need to conduct a study on the implementation of safety measures in secondary schools.

1.2 Statement of the problem

The persistent recurrence of safety problems in secondary schools poses serious questions that demand urgent answers if similar cases are to be avoided in future. This study therefore seeks to investigate the factors that affect the implementation of safety measures in secondary schools.

According to the Republic of Kenya (2008) school safety is an integral and indispensable component of the teaching and learning process. Indeed, no meaningful teaching and learning can take place in an environment that is unsafe and insecure to both learners and staff. It is therefore imperative that educational stakeholders foster safe and secure school environments to facilitate increased learner enrolment, retention and completion and hence attainment and quality education. The safety of the school depends to a large extent on measures taken to organize and manage such safety. In this respect, School Management Committee/Board of

Governors members, the head teacher, teachers, learners, parents and other stakeholders have important roles to play in facilitating and enhancing safety in schools. Nonetheless, it is the responsibility of the principals to ensure that safety measures are implemented in their schools.

1.3 Purpose of the study

The purpose of the study was to establish the importance of enhancing safety measures in secondary schools in kikuyu District. This created a conducive and safe environment for curriculum implementation.

1.4 Objectives of the study

1. To assess how the attitude of Principals has influenced the implementation of safety measures in secondary schools in Kikuyu District.
2. To examine the effects of training of students and staff in the implementation of safety measures in secondary schools in Kikuyu District.
3. To establish whether availability of funds influence implementation of safety measures in secondary schools in Kikuyu District.
4. To examine how the presence of safety measure policies in secondary schools influence their implementation.

1.5 Research Questions

The study sought to answer the following questions,

1. To what extent do the attitude of Principals influenced the implementation of safety measures in secondary schools in kikuyu District?
2. To what extent has the training of students and staff affected the implementation of safety measures in secondary schools in Kikuyu District?
3. How does availability of funds affect the implementation of safety measures in secondary schools in kikuyu District?
4. How has the presence of safety measure policies in secondary schools influenced their implementation?

1.6 Significance of the Study

It is hoped that the study would be of great help to various stakeholders in the education sector. School administrators will get to asses whether they have fully implemented safety

measures and get to know their areas of weakness. They would get to know how best to implement safety measures.

Policy implementers especially in the ministry of education can make use of the study to get guidelines on the implementation of safety measures in secondary schools. Scholars could also make use of the study to check on issues.

1.7 Limitations of the study

The researcher faced respondents who may not freely reveal school details to a third party for fear of victimisation by the employer. However, the researcher would assure the respondents that the research is basically for academic purposes and this would also be emphasized by the fact that the tools of research would not require his/her name or cell phone number.

Most administrators were busy and could not be readily available to respond to the researcher. The researcher would call in advance and book an appointment.

The study was carried out within Kikuyu District which was located in the periphery of the Capital City Nairobi. The sample was derived from Secondary schools within the District. The study sample therefore was derived from a small geographical area due to scarcity of resources and this was likely to affect generalization of the results.

1.8 Delimitation of the study

Since all schools are at risk if the safety measures were not implemented, it was certain that information on the extent of implementation was available. Schools could then use that information to set up ways and means of implementing safety measures.

1.9 Assumptions of the study

The initial assumption was that the respondents have knowledge of what safety in schools entails and that they gave their honest personal responses to the items in the questionnaire

1.10 Definition of significant terms

Attitude: This is the way of thinking or feeling about something, the way you behave towards something that shows how you think and feel

Disaster: This is serious disruption of the functioning of a community, causing widespread human, material, or environmental losses which exceeds the ability of the affected population to cope

Physical infrastructure: This refers to any built facilities for use in the school to facilitate the provision of services

Safety: According to The Oxford Advanced Learners Dictionary, safety is the state of being safe and protected from danger or harm.

Safety measures: Safety measures are activities and precautions taken to improve safety, i.e. reduce risk related to human life. In this study, this will be confined to the school environment

Safety standards: This refers to the recommended measures of putting up suitable facilities through Ministry of Education, Public Health, and the Ministry of Public Works building regulations

Stakeholders: These are people that are involved in a particular organization, project or system

Training: This is the process of learning the skills that you need to do a job

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter summarizes research findings in the same area of study by other researchers. It looks at the concept of feeling safe and the invitational theory on safety. It also conceptualises the study by looking at safety measures in schools, the factors influencing safety measures, the role and attitude of Head Teachers and how the presence of safety policies has influenced the implementation of safety measures.

2.1 Concept of Feeling Safe

What makes children feel safe is an elusive topic in the literature. There are, however, slivers of information hinting at factors worthy of study. Feeling “attached and contained” (Haigh, 1996) is observed to be related to a person’s experience of belonging and feeling safe. The quality of the child’s early attachment relationship with the primary caregiver has a vital role in personality development (Bowlby, 1988) through influencing the capacity of a person to modulate affect (Fonagy, *et al.*, in press) and to rely on internal representations of the caregiver (object constancy) to feel safe and soothed (Sroufe, 1996; Main, 1995).

People do not feel safe when they see violence on a regular basis. Overstreet and Braun (2000) asked 70 African American 10-15 year olds about neighbourhood safety and learned that, as common sense might suggest, children feel less safe in their neighbourhoods when they have continued exposure to violence. Feeling safe is clearly related to the effectiveness of public safety in keeping overt violence in a community low. Espelage, *et al.* (2000) in studying the social context of bullying found that feeling safe in a community was related to the presence of adult supervisors and the lack of negative influences. Children feel safer when they can see and feel their protectors and when their protectors are effective in combating the negative influences leading to bullying.

2.2 Theoretical framework

The study will rely on invitation theory as advocated by Purkey and Schmidt (1996). According to the advocates of invitation theory, there are five factors that affect the schools safety and they include people, places, policies, programs and processes. Invitation theory claims that these five factors make schools more socially appealing and safe. A main tenant of invitation theory is to revitalize schools and to encourage students to want go to school. On people, the theorists argue that the most valuable component of schools is human resources, which commonly comprises managers, teachers and students. On places, a negative physical places affects school members negatively while comfortable and aesthetically pleasing features make schools more appealing.

On policies, school policies consist of written or unwritten rules which regulate the continuous functions and individuals and the organization. On programs, a good impression may be made on school members and the environment by developing school programs that address human needs at large, instead of those that focus on narrow goals and on processes, school can be made more appealing by managers who create processes that enable interaction with social environment and cooperate with other organizations. Invitation theory is aimed at changing the limited communication styles between school members. In the context of this study, invitation theory is relevant as it is through the positive interaction of the various stakeholders that successful implementation of safety measures in schools can be achieved.

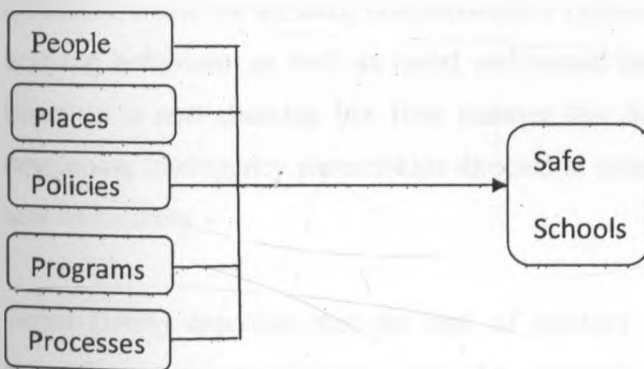


Figure 1: Theoretical Framework

2.3 Attitude of head teachers on school safety

Attitude is important to understand human behaviour. To define what exactly an attitude is, many attempts have been made in literature. Generally it is defined as a complex mental state involving beliefs. Anastasi (1957) defines attitude as a tendency to react in a certain way towards a designed class of stimuli. People's attitudes towards their profession have an effect on their performance. It is also valid for teaching profession. The quality of education is directly related to the quality of instruction. Teacher is instrumental for better instruction. He is required to have a higher professionalism because of rapidly changing circumstances. He is expected to use the best practices and strategies to meet the challenging demand of his career, which involves imparting knowledge and developing essential skills in the students. A good teacher is expected to be committed to his work and have the ability to take the initiative (Sparks, 1979). Teacher is expected to not only to master the subject and various methods of teaching but also to show that he is capable of selecting the various study materials according to the teaching goals and varied group of pupils. He also possesses the potentials to create a learning environment for the students (Vermunt and Verschaffel, 2000).

According to Clayton (2011) on peer intervention programs in Chicago, it was found that secondary school head teachers had a major role to play in implementation of safety measures in their respective schools. Some of the identified roles they could play included ensuring that all people involved with the school were working in support of safe schools, including parental involvement, careful screening and selection of all staff members, in-service training on school crime for all staff, comprehensive violence-prevention approaches intervention in bullying behaviour as well as racial and sexual harassment, addressing student discipline issues in a non shaming but firm manner that does not incite violence behaviour, and developing interagency partnerships directed at creating a safe school environment within a safe community

Gupta (1996) describes that the task of teachers is central to education. Teachers must transmit to new generation the cultural heritage of society - the knowledge, skills, customs, and attitudes acquired over the years. They must also try to develop in their students the ability to adjust to a rapidly changing world. The effective teacher is capable of creating a desire to learn, (Conant, 1993). Teaching is a complex and demanding profession. To sustain

their energy and enthusiasm for teaching, teachers need to maintain personal commitment to the job (Day, 2000).

Smith (1990) has claimed that teacher's personality in the attitudinal sense is a significant factor in teacher's behaviour and it has great impact on student's achievement. The teachers must know the art of communication, understanding others and ability to learn from the experiences. They should be able to facilitate learning effectively (Reddy, 1992). Bhatia and Bhatia (1988) describe that the teacher is a servant of the society entrusted with the task of modifying and developing the behaviour of the young child for maintaining and improving social patterns. The teacher can render this service to society only if he, above all, is a humanist - a human being in the true sense of the world. He is a person of high ideals and engaging personality. Wright (1987) describes that the primary function of teachers is to motivate the learners who are not motivated and to nurture those who are already well motivated to the task of learning.

The effective attitudes and actions employed by teachers ultimately can make a positive difference on the lives of their students, and this belief will serve as a key indicator towards what's being patronized in the school. Taking school occupational hazards and safety culture educational experiences, preserves teachers can discuss what they should or should not do with a class of students. Scharff, (2007) discussed the five frequently discussed attitudes and actions include that influence safety culture in schools: a genuine caring and kindness of the teacher, a willingness to share the responsibility involved in a classroom, a sincere sensitivity to the students' diversity, a motivation to provide meaningful learning experiences for all students, and an enthusiasm for stimulating the students' creativity.

Teachers have the opportunity to leave an indelible impression on their students' lives. School experiences mould, shape, and, can influence how children view themselves inside and outside of school. These school memories have the potential to last a lifetime in students' minds and can play a consequential role with present and future decisions. It does not take long for students to realize that teachers make the difference between a long and boring school year and an exciting and challenging year. Demonstrating caring and kindness and safety measures in school, this attitude pertains to the persona of the teachers. The effective teachers willingly shared emotions and feelings (i.e., enthusiasm, affection, patience, sadness,

and disapproval) as well as a sincere interest and care about their students this was a key contributing factor in student towards ensuring the school environment is safe for learning. Sharing Responsibility by teachers this attitude focuses on the ability of the teacher to establish a shared environment. It is important to allow students both responsibility and freedom within the classroom community towards contributing to their learning environment (Scharff, 2007).

Teachers sensitively accepting diversity towards the learning environment play an important role on the implementation of safety measures within the school. This attitude deals with empathy and the importance of understanding your students. Sensitivity, acceptance, and encouragement are critical when approaching issues associated with health and work safety. The attitude of fostering individualized instruction provides meaningful learning opportunities for all students. Students appreciate teachers who help them succeed with their learning experiences, which results in a reluctance to volunteer in any joint school programmes such as safety measures. Encouraging creativity as a virtue by teaches goes a long way in motivating student to undertake new avenues towards school initiated projects. This attitude stresses the importance of stimulating the students' creativity. Students feel appreciated and are personally motivated when teachers design safety measures that considered their interests, skills, and needs, (Scharff, 2007).

According to Omolo and Simatwa (2010) on assessment of the implementation of safety policies in public secondary schools in Kenya, head teachers were found to play a significant role in the implementation of safety policies. As the heads of their institutions, the responsibility of the actual implementation rested on their shoulders. Findings from the structured interviews reviewed that some of their roles included residing in the schools and implementing safety policies, monitoring and evaluating the school ascertain safety needs, appointing safety committee members and promoting a school safe zone culture. The study also revealed that the head teachers had a positive attitude towards implementation of safety measures and were actively involved in the process

2.4 Training of students and staff on safety

A teacher owes students a duty to take reasonable steps to protect them from any injury that the teacher should have reasonably foreseen. This requires teachers and principals not to just

react to situations as they arise but to engage in appropriate risk management to reduce the risk of injury. Principals should implement risk management processes for identifying and controlling hazards and risks. They should ensure sufficient members of staff are trained in first-aid to an appropriate level of competence to enable first aid to be given when necessary

Squelch (2001) propounds that a safe school is characterised by the presence of certain physical aspects such as a secure wall, fencing and gates, buildings that are in a good state of repair and well-maintained school grounds. Included in these indicators of school safety are good disciplines, a culture conducive to teaching and learning, professional teacher conduct, good governance and management practices, and an absence or low level of crime and violence. The following measures were given by Squelch in 2011 enumerating the standards acceptable for school safety: -

Fire Safety Measures in Schools:- Provision of adequate capacity and numbers of fire extinguishers to be provided in eye-catching spots in each block of the school; First Aid kits and necessary medicines should be readily available in the school; Provision of water tank and separate piping from the tank with hose reel to the ground floor and first floor; Fire fighting training to all teachers and students from; Fire Task Force in every school comprising of Head of the institution, two teachers / staff members and one member from the Fire and Rescue Department should be constituted; Display of emergency telephone numbers and list of persons to be contacted on the notice board and other prominent places; Mock drills to be conducted regularly; Fire alarm to be provided in each floor and for rural schools separate long bell arrangement in case of emergency.

Training of School Teachers and Other Staff:- The teachers along with other staff shall be trained to handle safety equipment, initiate emergency evacuations and protect their students in the event of fire and other emergencies by the Fire and Rescue Department; They shall also be trained in providing emergency first-aid treatment; There shall be a School Safety Advisory Committee and an Emergency Response Plan drafted by the Committee in approval and consultation with the concerned Fire & Rescue Department; Emergency Response Drills conducted at regular intervals to train the students as well as the school staff.

School Building Specifications: - The school buildings shall preferably be a 'A' Class construction with brick / stone masonry walls with RCC roofing. Where it is not possible to

provide RCC roofing only non- combustible fireproof heat resistance materials should be used; The nursery and elementary schools should be housed in single storied buildings and the maximum number of floors in school buildings shall be restricted to three including the ground floor; The School building shall be free from inflammable and toxic materials, which if necessary, should be stored away from the school building; The staircases, which act as exits or escape routes, shall adhere to provisions specified in the National Building Code of United Nation 2005 to ensure quick evacuation of children; The orientation of the buildings shall be in such a way that proper air circulation and lighting is available with open space all round the building as far as possible; Existing school buildings shall be provided with additional doors in the main entrances as well as the class rooms if required. The size of the main exit and classroom doors shall be enlarged if found inadequate; School buildings have to be insured against fire and natural calamities with Group Insurance of school pupils; Kitchen and other activities involving use of fire shall be carried out in a secure and safe location away from the main school building; All schools shall have water storage tanks.

2.5 Availability of funds for safety measures implementation

There is a vast body of literature that identifies the expansion of secondary education as a key component of successful development strategies (Schultz, 1988; Psacharopoulos, 1994). In spite of this general consensus, there is still much disagreement about how to allocate scarce public resources within secondary education sector in a cost effective way (Coady and Parker, 2002). Because of secondary education's middle position between primary and tertiary levels, its programs have had a functional role: giving students access to higher education, preparing students to lifelong education, and preparing students to work (World Bank, 2002). In addition to those traditional functions, society is increasingly demanding that secondary education encompass subjects such as the environment, human rights, drug addiction, safety, poverty and unemployment (World Bank, 2002). According to Lewin (2004) safety in secondary schooling will continue to be highly correlated with subsequent change in performance of the school.

Kitavi and Westhluzan (1997) reported overcrowding in dormitories in boarding schools, with sometimes double the originally intended number of students being accommodated In spite of those problems, an average boarding student enjoys living and studying conditions which are luxurious, compared to the hardship and squalor endured by many day students.

According to Clarissa (1992), Desarrollo (2007), Evans (1999) Jagero (1999) Scharff and Brady (2006) and Oloo (2003), the greatest problem faced by day students was home environment that was not conducive to reading. Other problems includes: long distances from school, bad company at home, lack of proper accommodation and proper diet.

A study by Rihani (2007) showed that for female students to feel safe in school environment it is not only necessary for community to acknowledge a harassment problem, it is also necessary to set up channels of reporting the incidences. Teachers should be empowered to report such behaviour and feel confident that appropriate action will be taken. A study by Scharff (2007) in Malawi found out that girls were more vulnerable than boys to abuse, both while in transit and when in school. To avoid lengthy walk to school some girls make their own lodging arrangement near community day schools that do not offer boarding facilities (Scharff and Brady, 2006). Those self boarders are unsupervised by the school and are therefore at risk of theft and self abuse (Scharff, 2007).

In a study on an assessment of the implementation of safety policies in public secondary schools in Kisumu East and West districts in Kenya, Omolo and Simatwa (2010) found that there were several factors influencing implementation of safety measures in secondary schools in Kenya including inadequate funds being the most significant, since implementation of safety policies involved extensive modification of existing buildings, the purchase of expensive safety equipments and fittings and capacity development at all levels. In addition, inadequate communication and coordination of stakeholders on safety issues was also cited by head teachers as another challenge influencing the implementation of safety policies

The adequacy and use of teaching and learning materials affects the effectiveness towards the implementation of safety measures in schools. Teaching and learning resources enhances understanding of abstract ideas behind the essence health and safety programmes hence lack of them leads to low understanding of safety measures strategies (Rihani,2007).

Migimu (2002), the quality of school administration plays a vital role in the establishment and implementation of health and safety measures in a school as it is concerned with pupils, teachers, rules, regulations and policies that govern the school system.

Teacher's motivation level at the school environment has an effect on the implementation process towards safety measures. World Bank Report (2006) acknowledges that teacher satisfaction is generally related to achievement... satisfied teachers would concentrate hence enhancing high performance of the school and support towards a safe learning environment.

Migimu (2002) noted that pupil-based factors were critical in affecting the implementation of safety in any school setting. These are the factors within the pupils that could enhance or hinder the implementation of safety measures as defined in a school. In the pupil based factors; the following aspects were looked into: pupils' cultural background, pupils' rate of absenteeism and pupils' level of discipline to school.

Government role is very critical. The role of both the government in education and of educators illustrates the importance of collaborative efforts regarding school safety. Vienings, Commys and Geyer (2001) put emphasis on the fact that for safety measures at a school to work all stakeholders need to be involved so as to create ownership and pride. With this background, it becomes imperative to look at basic safety and security features of schools' physical environments.

Parents' Consultation with Teachers on the good performance is realized when parents work in consultation with the teachers in order to understand their children better. Ubogu (2004) indicated that parents' interaction with the school enables them to know what their children are encountering in school and what could be done to deal with the problems. It would also put pupils on alert and study in school as they would know that their parents would inquire about their performance and the safety measures in place to support good performance.

2.6 Presence of Safety Policy

Theoretically, policy implementation has been defined by many remarkable scholars. According to Pressman and Wildavsky (1973) in their study on minority job creation policy, policy implementation is the process of interactions between the setting of goals and the actions geared to achieving them. Proper implementation requires government officials to translate broad agreements into specific decisions. Furthermore, the degree of goals accomplished through a specific decision could be a measurement of the success of policy implementation (Pressman and Wildavsky, 1979). Similarly, Mazmanian and Sabatier (1983)

provided a definition of policy implementation as follows: "the carrying out of the basic policy decision, usually incorporated in a statute but which can also take the form of important executive orders or court decisions." Ideally, that decision identifies the problem(s) to be addressed, stipulates the objective(s) to be pursued, and in a variety of ways, "structures" the implementation process. The process normally runs through a number of stages, beginning with the passage of the basic statute, followed by the policy outputs (decisions) of the implementing agencies, the compliance of the target groups with those decisions, the actual impacts of those outputs, the perceived impacts of agencies decisions, and finally important revisions in the basic statute.

Horn (1975), states that "policy implementation encompasses those actions by public and private individuals (or groups) that are directed at the achievement of objectives set forth in prior policy decisions." This definition includes the effort to transform decisions into operational terms, and also the effort to achieve large and small changes mandated by policy decisions. Specifically, policy implementation is a relationship of concern among stake holders.

The primary responsibility for providing safety instruction and a safe working environment belongs to the teacher (McMahon, 1975). But can teachers ensure a safe working environment without support from school administrators? Safe and secure school environments are a requirement by law. Sections 24(1) and 28(1) of the Constitution (Republic of South Africa, 1996) provide that "everyone has a right to an environment that is not harmful to their health and well-being" and every child has the right to be protected from maltreatment, neglect, abuse or degradation. The Gauteng Schools Act (Gauteng Department of Education, 1997) stipulates that all learners or educators shall be protected from all forms of physical or mental violence at schools and centres of learning. School safety is best described by what a safe school is. As noted earlier, a safe school is a school that is physically and psycho-socially safe. Regarding the school's physical environment, the most visible aspects of such features are the quality of the security and maintenance of school buildings and grounds. This implies a clean and safe environment that is conducive to education and has security of property, well-cared for facilities, furniture and equipment, clean toilets, water and green environment and absence of harassment (Squelch, 2001).

In a study on annual school safety in the United States of America, the United States Development Education (2004) various approaches are used in enhancing school safety in the United States of America. School wide policies and practices are effected to systematically address needs of students, school personnel, the community and the physical plants of the school. The United States department of Education (U.S.D.E) requires safety policies in schools to be strictly enforced in view of threats posed by terrorism, drug related violence, proliferation of firearms and natural disasters like typhoons, floods and hurricanes. Most American public schools have zero tolerance policies on activities that are likely to compromise safety. For example, ninety six percent of public schools required visitors to sign in before entering into the schools while eighty percent of public schools had closed school policy that prohibited students from leaving school premises except at specific times, six percent of schools had policemen or other law enforcement personnel stationed thirty hours a week or more at the school in a typical week.

In study on promoting safety in schools in Australia, Shaw (2002) found that both common wealth and state initiatives had addressed school safety issues by developing a consistent approach to school safety across all states and is investing in long term projects that aim to strengthen the capacity for schools, their staff and communities. A comprehensive review of school based prevention projects and policies had been undertaken. Innovative and restorative approaches that dealt with safety in schools had been piloted in Queensland and the Australian Capital Territory.

In a study on an assessment of the implementation of safety policies in public secondary schools in Kisumu East and West districts in Kenya, Omolo and Simatwa (2010) found that safety policies were had been implemented in various ways including teachers and head teachers taking up residences in the school compound, most of the schools under study (70%) had emergency doors in the dormitories, eight out of 30 schools (60%) had safety instructions prominently displayed in laboratories and workshops while 10 schools (50%) had successfully implemented the policy requiring dormitory windows to open outwards and be without grills. In addition, 29 schools (96.67%) had first aid kits in schools and eight (26.67%) had fire extinguishers. One school treated water at central point while 7 schools regularly used treatment chemicals in water storage tanks while 16 schools had protected bore holes.

2.7 Conceptual framework

This study seeks to establish the factors that affect the implementation of safety measures in secondary schools, a case of Kikuyu District, Kiambu County. The independent variables are; the attitude of Principals towards implementation of safety measures, training of students and staff, availability of funds and safety measure policies. The research will thus determine the effects of those factors on the dependent variable which will be implementation of safety measures in schools.

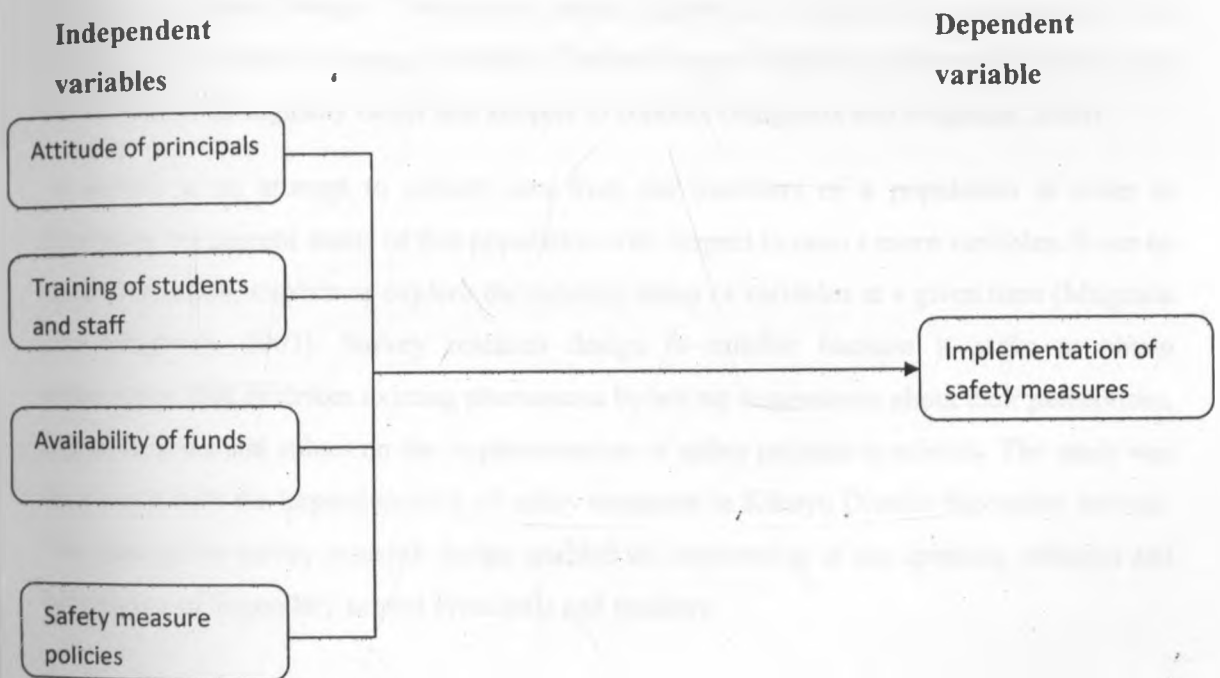


Figure 2: Conceptual framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter represents the research design and methodology which was used to carry out the study. It described the type and source of data, the target population and sampling methods and the techniques that were used to select the sample. It also describes how data was collected and analyzed.

3.2 Research Design

Research design is the outline, plan or scheme that is used to generate answers to the research problem. It is basically the plan and structure of investigation. The study adopted a descriptive survey design. Descriptive design studies are conducted in communities to establish the extent of a range of issues. The studies are limited in geographical scope and hence tend to be logically easier and simpler to conduct (Mugenda and Mugenda, 2008).

A survey is an attempt to collect data from the members of a population in order to determine the current status of that population with respect to one or more variables. It can be used to describe, explain or explore the existing status of variables at a given time (Mugenda and Mugenda, 2003). Survey research design is suitable because it seeks to obtain information that describes existing phenomena by asking respondents about their perceptions, attitudes, roles and values on the implementation of safety policies in schools. The study was concerned with the implementation of safety measures in Kikuyu District Secondary schools. The descriptive survey research design enabled the exploration of the opinions, attitudes and behaviours of Secondary school Principals and teachers.

3.3 Target Population

The target population of the study was drawn from Secondary School Principals and teachers in Kikuyu District. These are approximately 45 Secondary schools with 520 teachers. Principals and teachers are charged with the duties of implementing various educational policies and hence the choice.

3.4 Sample size and sampling procedure

Sampling is the process of selecting a number of individuals or units for inclusion in a research study in such a way that estimates of the characteristics of the large study group (population) from which they are chosen have no (or minimal) bias and have known confidence limits based on correctly calculated sampling errors.

The sample indicates the individuals or groups of individuals that participated in the study and how these individuals were selected. It is recommended that researchers use the largest sample possible because statistics calculated from a large sample are more accurate and representative. The sample size depends on the type of research design. In descriptive studies 30% of the accessible population is enough (Mugenda and Mugenda 2008). In this case 30% of 45 made the sample size of the study about 15 Secondary school Principals and about 156 Teachers drawn from all the schools.

The sample size was determined using stratified sampling method. The study used a computer software to generate n random numbers between 1 and N (where n is the sample size and N is the last number in the sampling frame)

The sampling frame is a physical list, a directory or index of cases or subjects from which to draw the sample. Subjects or cases selected from the sampling frame form the units of observation in the study. In this study it comprised the total number of Secondary Schools in Kikuyu District that are registered with the Ministry of Education.

The study used a Stratified Sampling Technique. The population was divided into Boarding and day schools and then a simple random sample taken from each group. This method helps to reduce biases or prejudices in selecting samples (Kasomo D, 2006).

3.5 Data collection methods

The main instrument in the study was a questionnaire. Questionnaires were distributed to randomly selected samples of Secondary Schools within the District. The questionnaire included both open-ended and closed questions. The open ended questions encouraged the respondents to express their views while the closed questions gave the respondents a chance to express their opinions and give the researcher a chance to get specific answers towards the research. The questions were simplified to enable the respondents complete them with ease.

The questionnaire included the construct items adapted from previous studies (Venkatesh and Bala, 2008) modified to meet the needs of this research. The respondents' demographic information such as gender, age group, years of experience as a Principal and as a teacher was be captured using single item questions.

The completed questionnaires were then checked for plausibility (truthfulness), integrity and completeness by the respondents. The respondents were required to complete the questionnaires voluntarily. This method of administering questionnaires was convenient because they can be dropped and picked later when duly completed.

3.6 Validity of Data Collection Instruments

A questionnaire is said to be valid when it actually measures what it claims to measure. Content validity was established through two steps. The first step was consulting senior academic lecturers who were experts in the field. The supervisor of this study was closely consulted. The feed back helped to affirm and improve the instrument. The second step was conducting a pilot study. The respondents targeted were 10% of the sample size. The pilot run provided a check on the feasibility of the proposed procedure for coding data and show up flaws and ambiguities. The pilot of this study was based in Limuru District which is in the same county as Kikuyu District.

3.7 Instrument reliability

An instrument is reliable when it can measure a variable accurately and consistently and obtain the same results over a period of time. Scientific researchers recommend a split half method to measure reliability of a test. In this study reliability of the research instrument was tested using the following method: The instrument was split into odd-numbered items and even-numbered items. The scores on the odd items were correlated with scores on the even items of the test. The split half correlation obtained was transformed into appropriate reliability estimate of entire test using the Spearman-Brown prophecy formula:

$$R = \frac{2r}{1+r}$$

Where

R = the estimated reliability of the entire test.

r = the Pearson r correlation between the two halves

3.8 Data collection procedures

The first step was to liaise with the supervisor who processed a document to facilitate the issuance of a permit by the Ministry of Education so that the researcher could conduct the study. The researcher then contacted the relevant authorities in the area where the study took place like the District commissioner and the District Education Officer to alert them on the intended data collection. The next step was collection of data from the respondents through the use of questionnaires. Where necessary the respondents were given five days to submit the instrument for correction and subsequent analysis of the data.

3.9 Data Analysis technique

The data collected was sorted out to indicate those that have been answered and those that have not been answered. They then were coded and entered into the computer for analysis using Statistical Package for Social Sciences (SPSS). Both qualitative and quantitative data was obtained. Descriptive statistics was used to analyse the quantitative data. The data was presented in form of percentages and frequencies. This helped in describing the distribution of scores in the ordinal and nominal scale of measurement that were used. In using the frequency distribution various frequency representations were used. Qualitative data from the open ended questions was thematically presented in narrative form where possible. An in-depth content analysis was used to analyze the qualitative data and the result presented in prose form.

3.10 Ethical Considerations

This study ensured that the confidentiality of all data accrued is kept by coding the instruments used in data collection. Respondents were also not required to enter their names. The data collected was generalized to only address the objectives of this study. Before enrolment of any participants into the study, consent was sought.

3.10 Operationalization of variables

Table 3.1: Operationalization of variables

Objective	Variables	Indicators	Measurement	Measurement scale	Study design	Tools of analysis	Specific tools
How the attitude of principals has influenced implementation of safety measures	Independent variable Attitude Dependent variable Implementation of safety measures	Priorities by principals	Prioritization of projects	Ordinal nominal	Descriptive survey Inferential statistics	Central tendency Test of relationship	Mode Proportion Chi-square ANOVA
Effects of training of students and staff on implementation of safety measures	Independent variable Training of students and staff Dependent variable Implementation of safety measures	seminars	No. of seminars	Ordinal nominal	Descriptive survey Inferential statistics	Central tendency Test of relationship	Proportion Chi-square ANOVA
Whether availability of funds influence implementation of	Independent variable Availability of funds	Amount allocated	Amount spent	Ordinal nominal	Descriptive survey Inferential statistics	Central tendency Test of relationship	Proportion Chi-square

safety measures	Dependent variable Implementation of safety measures						ANOVA
How the presence of safety measure policies influence their implementation	Independent variable Presence of safety measure policies	Presence of policy documents	Compliance	Ordinal nominal	Descriptive survey Inferential statistics	Central tendency Test of relationship	Proportion Chi-square ANOVA

CHAPTER FOUR

ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Introduction

This chapter entails the findings of the study based on the data collected from the field. The analysis focussed on establishing the importance of enhancing safety measures in secondary schools in kikuyu District. A sample size of 20 principals and 150 teachers was used. The data was analyzed using SPSS and the information presented in tables.

4.2 Demographic Information

In order to capture the general information of the respondent's issues such as gender, age, education level and category of the school were captured in the first section of the questionnaire.

4.2.1 Gender of respondents

Table 4.1 Gender of respondents

	Male		Female		Total
	F	%	F	%	
Teachers	71	47.3	79	52.7	150
Principals	8	40.0	12	60.0	20

The study established that 52.7% of the teachers were female while 60% of the principals were also female. This clearly shows that the study was dominated by female.

4.2.2 Ages of Respondents

Table 4.2 Ages of Respondents

	Less than 30		31-40		41-50		50 and above		Total
	F	%	F	%	F	%	F	%	
Teachers	37	24.7	35	23.3	70	46.7	8	5.3	150
Principals	-	-	-	-	16	80.0	4	20.0	20

According to the findings, majority of the teachers 46.7% were between the ages of 41-50 while 80% of the principals were between the age bracket of 41-50. This shows that majority in this category had had experience in the teaching industry.

4.2.3 Length of stay in the Profession

Table 4.3 Length in the Profession

	Below 5		5-10		10-15		15-20		20-25		Over 25		Total
	F	%	F	%	F	%	F	%	F	%	F	%	
Teachers	44	29.3	11	7.3	17	11.3	47	31.3	28	18.7	3	2.0	150
Principals	-	-	-	-	-	-	4	20.0	10	50.0	6	30.0	20

The study shows that majority of the teachers 31.3% had been in the teaching profession for 15-20 years while 50% of the principals had been in the profession for 20-25 years. This is a clear indication that the teachers under the study had enough experience and would offer viable information to the researcher.

4.2.4 Level of Education

Table 4.4 Level of Education

	Diploma		Bachelors		Masters		PhD		Total
	F	%	F	%	F	%	F	%	
Teachers	29	19.3	105	70.0	13	8.7	3	2.0	150
Principals	-	-	12	60.0	8	40.0	-	-	20

According to the findings, 70% of the teachers indicated that they had attained bachelors as their highest level of education while 60% of the principals said that they too had attained a bachelors as their highest level of education. This shows that majority of the teachers and principals were well qualified for their profession.

4.2.5 Category of School

Table 4.5 Category of School

	Day		Boarding		No response		Total
	F	%	F	%	F	%	
Teachers	86	57.3	61	40.7	3	2.0	150
Principals	16	80.0	4	20.0	-	-	20

The study shows that majority of the teachers 57.3% indicated that the category of their school was day while 80% of the principals said that they were from day schools.

4.3 Safety measures in Schools

This section of the study shows the safety measures that the schools have put in place.

4.3.1 Safety measures in schools

Table 4.6 Safety measures in schools

	Yes		No		Total
	F	%	F	%	
Teachers	130	86.7	20	13.3	150
Principals	20	100.0	-	-	20

Majority of the teachers 86.7% and 100% of the principals indicated that they have ever heard of safety measures in schools.

4.3.2 Safety measures present

The teachers indicated that they had heard of safety measures such as fire extinguishers, emergency doors, windows without grills, first aid kits. There were drugs like painkillers to be used by students in case of an injury some pain causing sickness. The schools created awareness to students in case of any disaster. Those in boarding schools indicated that emergency doors in the dormitories, smoke detectors in the dormitories doors in dorms and classes opening outwards, clear isles in dorms and classes. Laboratory rules and safety measures were put in place. The schools provided safe and secure learning environment e.g. emphasized rules that govern how pupils conduct themselves in the laboratories, doors were fitted in such a way that they open from outside. The schools premises were secured with strong perimeters fence and they hired adequate security personnel.

The principals on the other hand indicated that safety was ensured in play fields, safety through physical infrastructure and transporting safety. Secondly availability of fire extinguishers, enlightening the students on what to do in cases of fire outbreaks was indicated by principals. Fire alarms/ escape and first aid kits had been put in place in the school premises. Lastly safety in the school premises was ensured through strong fences and lockable gates and having security personnel.

4.3.3 Availability of Safety measures in schools

Table 4.7 Availability of Safety measures in schools

	Yes		No		No response		Total
	F	%	F	%	F	%	
Teachers	126	84.0	22	14.7	2	1.3	150
Principals	20	100.0	-	-	-	-	20

The study shows that 84% of the teachers and 100% of the principals indicated that there were safety measures put in place in their schools.

4.3.4 Types of measures

The teachers revealed that measures such as accessible exit doors classroom doors opening from outside were available. Alarm systems were placed at strategic places where they were accessible to everyone. Fire extinguishers and first aid kits have been placed everywhere. Those in boarding schools have ensured adequate spacing of beds and exit doors have been placed in the dormitories. The management in the schools has ensured that in the laboratories where fire is prone they have placed fire extinguishers. The teachers further revealed that the school management had fenced the schools premises and ensured they hired security personnel.

The principals stated that the measures that the schools had put in place included -registration of schools and lockable gates. The management ensured that they offered clean classrooms and toilets and ventilated rooms. Those in the boarding schools indicated that they ensured proper food storage. There was provision of fire extinguishers and first aid kits placed in strategic places. The schools premises were fenced and security personnel provided. The management ensured that the schools premises were drug free environment through manning of entry points.

4.3.5 Adequate measures

Table 4.8 Measures adequate

	Yes		No		No response		Total
	F	%	F	%	F	%	
Teachers	65	43.3	79	52.7	6	4.0	150
Principals	2	10.0	18	90.0	-	-	20

According to the findings, 52.7% of the teachers and 90% of the principals indicated that the safety measures put in place were not adequate.

4.3.6 Reasons for measures not been adequate

The teachers had various reasons as to why the measures put in place were not adequate. The teachers indicated that some building served purposes that they were not designed for and this was hazardous. The management failed to create awareness among the teachers and students on fire control. Insufficient funding to enhance safety measures was also cited. There was need to have more fire extinguishers and emergency exits in classrooms installed. The teachers cited that the students invented ways of sneaking outside schools and this exposed the schools to outsiders. Some teachers indicated that their schools lacked gas masks due to their high prices. Fire extinguishers were in place but they were few in number.

On the other hand the principals felt that the measures were not adequate because there was lack of capacity and funding. Further there was need to insure life and property. Some of the principals felt that the schools lacked adequate number of watchmen. The management lacked classrooms for special need cases/learners such as the physically challenged. They further cited that there were no enough fire extinguishers. The principals further addressed challenges such as neighbours playing loud music. Lastly they cited lack of training among the teacher and students on how to use safety equipments.

4.3.7 Training on implementation

Table 4.9 Training on implementation

	Frequency	Percent
Yes	31	20.7
No	119	79.3
Total	150	100.0

According to the findings, majority of the teachers 79.3% indicated that they had never had any training on implementation of safety measures. Only 20.7% agreed to have training on implementation.

4.3.8 Help of training on implementation

Of the few who agreed that they had training, they indicated that training had helped them in various ways namely: advising others on the need of enough and air circulation in classroom and need of fire extinguisher. They were in a position to advise the management to install fire breakers where students could access and know how to use them. The teachers revealed that the training enabled them create awareness on fire fighting and they could now offer first aid when need be. The training enabled the teachers to safeguard their students and could help put off fire.

4.3.9 Role in Safety measures implementation

The teachers indicated that their role in safety measures implementation included: ensuring that correct procedures were followed. Enlighten others on the importance of safety in the school. Constant checking leakages for chemicals/gases especially in the laboratory was seen as important. Their role included continually encouraging learners to practise the safety measure. They facilitated seminars on safety and disaster management, ensuring that safety gadgets were in place and functioning. It was the teacher's role to sensitize all concerned parties on how to respond to emergencies. They trained students on the use of safety equipments.

The principals indicated that their roles entailed continually reminding all the students and teachers what to do in cases of emergency. They had to ensure that safety measures were implemented through facilitation and frequent supervision. Thirdly their role entailed inviting safety personnel to train the students and teachers on the various safety measures. The principals sensitized stakeholders about their rights and safety measures. Lastly the principals stated that they sourced for funds to implement the safety measures in schools.

4.3.10 Safety implementation

Table 4.10 Safety implementation (teachers)

	Mean	Std. Deviation
Implementation of safety measures in schools is not necessary	4.2635	1.32152
Disaster management training should be made compulsory	1.5333	.89493
School disasters are inevitable even with safety systems in place	3.0000	1.42367
Safety policy implementation should be prioritized	1.5800	.85350
It is impossible to satisfactorily implement safety measures	3.7667	1.21742
Teacher have no role in implementing safety measures	4.4467	.70030

The mean scores were represented by “1-2.5” represented agreed, “2.6-3.5” represented undecided while “3.6-5.0” represented disagree. The respondents disagreed that implementation of safety measures in schools was not necessary and it was represented by a mean score of 4.2635. On the other hand the respondents agreed that disaster management training should be made compulsory as shown by a mean core of 1.5333 while 3.000 were undecided that the schools disasters were inevitable even with safety systems in place. Further the teachers agreed that safety policy implementation should be prioritized as represented by a mean score of 1.5800. In addition the teachers disagreed that it was impossible to satisfactorily implement safety measures and that teachers had no role in implementing safety measures as shown by a mean score of 3.7667 and 4.4467 respectively.

Table 4.11 Safety implementation (principals)

	Mean	Std. Deviation
Implementation of safety measures in schools is not necessary	4.4000	1.23117
Schools can afford to implement safety measures	2.0000	.64889
Disaster management training should be made compulsory	1.3333	.48507
Schools disasters are inevitable even with safety systems in place	2.9000	1.07115
It is impossible to satisfactorily implement safety measures	2.1000	1.33377
Principals have no role in implementing safety measures	3.3000	1.21828

The mean scores were represented by “1-2.5” represented agreed, “2.6-3.5” represented undecided while “3.6-5.0” represented disagree. The principals disagreed that implementation of safety measures in schools was not necessary as shown by a mean score of 4.4000. Further 2.0000 agreed that schools can afford to implement safety measures while 1.3333 agreed that disaster management training should be made compulsory. On the other hand 2.9000 were undecided that schools disasters were inevitable even with safety systems in place while 2.1000 agreed that it was impossible to satisfactorily implement safety measures. In addition 3.3000 disagreed that principals have no role in implementing safety measures.

4.3.11 Attendance of seminars on safety

Table 4.12 Attendance of seminars on safety

	Frequency	Percent
Yes	8	40.0
No	12	60.0
Total	20	100.0

The study established that 60% of the principals indicated that they had never attended any seminar on safety in schools while a few 40% said that they had ever attended a seminar on safety in schools.

4.3.12 Help gained in the Seminars

The principals indicated that the seminars attended helped them in ensuring that the necessary equipments /kits were availed in school. Secondly the seminars helped in sensitizing on key issues pertaining to safety measures even using none costly resources.

4.3.13 Organization of Trainings on safety

Table 4.13 Organization of Trainings on safety

	Frequency	Percent
Yes	6	30.0
No	14	70.0
Total	20	100.0

According to the findings, 70% of the principals disagreed that the schools organized training on safety for teachers and students. Only 30% agreed that the schools organized training on safety for teachers and students.

4.3.14 Duration of the Trainings

Table 4.14 Duration of the Trainings

	Frequency	Percent
Once a term	2	10.0
Once a year	4	20.0
No response	14	70.0
Total	20	100.0

The study established that 20% of the principals indicated that trainings were held once a year while 10% stated that they were held once a term.

4.3.15 Safety Policies

Table 4.15 Safety Policies

	Yes		No		No response		Total
	F	%	F	%	F	%	
Teachers	57	38.0	91	60.7	2	1.3	150
Principals	10	50.0	10	50.0	-	-	20

Table 4.11 shows that 60.7% of the teachers disagreed that there were safety policies in the school while 50% of the principals disagreed to the same statement. However 50% of the principals agreed that they were safety policies in the schools.

4.3.16 Safety policies implementation

The teachers indicated that safety policies affected implementation in that it enhanced implementation of safety measures. It created a positive good environment for showing the students the importance of taking care and avoiding risks. The safety policies enabled the

construction of structures which happened in line with the safety measures policy. The safety policies enabled the schools to identify strategic places where they could place fire extinguishers.

4.3.17 Government Interventions

Table 4.16 Government Interventions

	Yes		No		No response		Total
	F	%	F	%	F	%	
Teachers	55	36.7	93	62.0	2	1.3	150
Principals	12	60.0	8	40.0	-	-	20

The study established that 62% of the teachers disagreed that the government was committed towards implementation of safety measures in schools. However 60% of the principals agreed that the government was committed towards implementation of safety measures in schools.

4.3.18 Ways Government is committed

The teachers indicated that the government had shown commitment through allocation of funds to purchase materials for safety. They ensure that fire extinguishers are checked regularly so that they can be in good conditions. Further the government has placed measures on ensuring that sensitization has been done on students on safety skills. They have ensured that any construction undertaken meets the standards and procedures of architecture. The teachers said that the government has offered continually offered induction courses training, seminars and workshops on safety measures. Moreover the teacher indicated that the government funded quality assurance team that visited and inspected schools.

The principals indicated that the government ensured implementation of safety policy through quality assurance and training of teachers on disaster management. Further the government released safety measurements to be observed in schools manuals and circulars. The government ensured safety implementation through school competition programmes and safety awareness issues were raised. Lastly through the Children Act of 2001, bills of rights and disabilities provision in the law the safety measures were adhered to.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the data findings conclusions and recommendations and suggested areas of further study on the importance of enhancing safety measures in secondary schools.

5.2 Summary of findings

Attitude of principals, training, availability of funds and safety measure policies all affect implementation of safety measures in schools. The following were the summary of the research findings upon which the conclusion and recommendations of the study were made.

5.2.1 Extent to which attitude of Principals influence the implementation of safety measures

The study noted that the principals had a positive impact on the implementation of safety measures in schools. The principals devised programmes and measure that the students and the teachers had to follow. The principals indicated that their roles entailed continually reminding all the students and teachers what to do in cases of emergency. They had to ensure that safety measures were implemented through facilitation and frequent supervision. Thirdly their role entailed inviting safety personnel to train the students and teachers on the various safety measures. The principals sensitized stakeholders about their rights and safety measures. Lastly the principals stated that they sourced for funds to implement the safety measures in schools. The principals stated that the measures that the schools had put in place included -registration of school and lockable gates. The management ensured that the offered clean classrooms/toilets and ventilated rooms. Those in the boarding schools indicated that they ensured proper food storage. There was provision of fire extinguishers and first aid kits placed in strategic places. The schools premises were fenced and security personnel provided. The management ensured that the schools premises were drug free environment through manning of entry points.

5.2.2 Extent to which training affected the implementation of safety measures

It was evident that the teachers hardly had any training on implementation of safety measures. Of the few who agreed that they had training, they indicated that training had helped them in various ways namely: advising others on the need of enough and air circulation in classroom and need of fire extinguisher. They were in a position to advise the management to install fire breakers where students could access and know how to use them. The teachers revealed that the training enabled them create awareness on fire fighting and they could now offer first aid when need be. The training enabled the teachers to safeguard their students and could help put off fire. The study established that the principals indicated that they had never attended any seminar on safety in schools and that the management hardly organized training on safety for teachers and students.

5.2.3 Effects of availability of funds on the implementation of safety measures

The study established that both the teachers and the principals cited that there was lack of funding and capacity that hindered safety measures implementation. Insufficient funding failed to enhance safety measures since the institutions could hardly purchase equipments related to safety. Some teachers indicated that their schools lacked gas masks due to their high prices. Fire extinguishers were in place but they were few in number. The schools which mainly depend on government funding are not getting any funds for implementing safety measures.

5.2.4 Effects of presence of safety measure policies

The study established that the teachers and principals agreed that many schools did not have safety measure policies. Only half of the principals agreed that they have safety measure policies in place. Where policies were in place, they acted as reference for the teachers and students in implementation of safety measures. Safety measure policies ensured that all the stakeholders were aware of their responsibilities in ensuring that safety measures were implemented. The teachers indicated that safety policies enhanced implementation of safety

measures. It created a positive good environment for showing the students the importance of taking care and avoiding risks. The safety policies enabled the construction of structures which happened in line with the safety measures policy. The safety policies enabled the schools to identify strategic places where they could place fire extinguishers.

5.3 Conclusions

The study concluded that the principals have a positive impact on the implementation of safety measures in schools. The principals devised programmes and measure that the students and the teachers had to follow. This concurs with Clayton (2011) on peer intervention programs in Chicago. It was found that secondary school head teachers had a major role to play in implementation of safety measures in their respective schools. Some of the identified roles they could play included ensuring that all people involved with the school were working in support of safe schools, including parental involvement.

It was noted that training on safety measures was hardly offered and the few who had a chance indicated that it was not effective and adequate. According to the literature review training of School Teachers and Other Staff helps them learn to handle safety equipment, initiate emergency evacuations and protect their students in the event of fire and other emergencies by the Fire and Rescue Department; They are also trained in providing emergency first-aid treatment; There is a School Safety Advisory Committee and an Emergency Response Plan drafted by the Committee in approval and consultation with the concerned Fire & Rescue Department; Emergency Response Drills conducted at regular intervals to train the students as well as the school staff.

It was evident that lack of funding and capacity hindered safety measures implementation. This concurs findings by Omolo and Simatwa (2010) in a study on an assessment of the implementation of safety policies in public secondary schools in Kisumu East and West districts in Kenya, found that there were several factors influencing implementation of safety measures in secondary schools in Kenya including inadequate funds being the most significant, since implementation of safety policies involved extensive modification of existing buildings, the purchase of expensive safety equipments and fittings and capacity development at all levels.

The study concluded that safety policies enhanced implementation of safety measures. It created a positive good environment for showing the students the importance of taking care and avoiding risks. This is in agreement with Omolo and Simatwa (2010) in a study on an assessment of the implementation of safety policies in public secondary schools in Kisumu East and West districts in Kenya, found that safety policies were had been implemented in various ways including teachers and head teachers taking up residences in the school compound, most of the schools under study had emergency doors in the dormitories, eight out of 30 schools had safety instructions prominently displayed in laboratories and workshops.

5.4 Recommendations

Principals in any organisation deal with an enormous range of issues on a daily basis, and face the constant pressure of making decisions to ensure the safety of staff and students. They must establish priorities for dealing with these issues and take account of health and safety. When communicating about safety with teacher and students, the communication preference will need to be concise, well thought out, in a logical sequence, and relate to their role. As principals have their own priorities and issues, the language used may need to provide examples and solutions that are outcome-focused, relate to risk assessment, provide cost and time-saving (where possible), and preserve or enhance health and wellbeing. Examples may need to draw upon personal reputation and value-adding to the institution to motivate principals to work safely and to support the safety initiatives.

The secondary schools should have tools, initiatives and proper planning need to be in place in order for safety, convenience and mobility to be enhanced. Safety, mobility and convenience are closely related, for example; preventing a crash enhances safety, improves the traffic flows, which enhances mobility, with reduced delays, - convenience.

The government and other stakeholders should provide adequate funding, since implementation of safety policies involves extensive modification of existing buildings, the purchase of expensive safety equipments and fittings and capacity development at all levels.

The adequacy and use of teaching and learning materials affects the effectiveness towards the implementation of safety measures in schools. Thus the management in the institutions should have teaching and learning resources that will enhance understanding of abstract ideas behind the essence health and safety programmes. Thus the institutions should provide safety strategies measures and extensive training to both the students and the teachers.

5.5 Suggestions for further Studies

Based on the research findings that emerged from this particular study there are several areas of future research.

A further research project could involve the development and design of model safety and health plans that could serve as master documents or standard templates to schools on safety education and training.

The researcher suggests that future studies to be conducted using interview guide and involve respondents from all levels into discussions. This would help the researcher direct the conversation towards the topics on the importance of enhancing safety measures in secondary schools.

REFERENCES

- Anastasi, A. (1957). *Principals of Psychological Testing*. McMillan Company, New York, USA.
- Bhatia, K.L. and B. D. Bhatia. (1988). *The Principles and Methods of Teaching*. POAB HousePublishers. New Delhi. India. p.137.
- Bowlby, J. (1973). *Attachment and loss*, Vol 2: Separation: Anxiety and anger. London: Hogarth Press and Institute of Psycho-Analysis.
- Brigham: Kennedy Centre for International Studies of Brigham Young University. *African Journal of Education and Technology*, Volume 1 Number 1, April 2011; pp. 127-138
- Cavanagh S (2004). Schools abroad brace against terrorism. Education Week 6th October,2004
- Celik, V. (2000). *Classroom management*. Ankara: Nobel Publishing.
- Clayton, B. (2011). *Peer intervention program in Chicago*. Retrieved March 16th from <http://www.ncrel.org/sdrs/areas/issues/envrnmnt/drugfree/sa200.htm>
- Coady, D. and Parker, S. (2002). *Cost—Effectiveness Analysis of Demand and Supply of Education Intervention: The case of PROGRESSA in Mexico*. Washington D.C: World Bank.
- Conant, J.B. (1993). *The Education of American Teachers*. McGraw Hill. New York. USA. p.11.
- China, (2007). *Boarding Schools for Children of Migrant workers in China*. Beijing: Government Printer.
- Creswell, J. W. (2003). *Research Design: Quantitative, Qualitative and Mixed Method Approaches*. London: Sage Publication Thousands Oaks.

- Davis, F D (1989) "Perceived Usefulness, Perceived Ease of Use and User Acceptance of Information Technology". *MIS Quarterly* 13 (3), 319-339
- Day, C. (2000). *Stories of Change and Professional Development: The Costs of Commitment*. In C. Day and A. Fernandez and T. Hauge and J. Moller (Eds.), *The Life and Work of Teachers: International Perspectives in Changing Times* (pp 109-129). Falmer Press, London
- Desarrollo, I. (2007). *The Quality of Education in Latin America and Caribbean Latin America*. Washington D.C: Research Work Institute World Bank.
- Donmez, B. and Guven, M. (2002). 'School safety perceptions and expectations of high school teachers and school managers', *Journal of Lifelong Education*, 75 (74): 60-64
- Espelage, D., Bosworth, K., and Simon, T. (2000). Examining the social context of bullying behaviors in early adolescence. *Journal of Counseling & Development*, 78(3), 326-333.
- Evans, H. L. (1999). *Gender and Achievement in Secondary Education in Jamaica*. Kingston: Kingston Policy Development Unit.
- Fairchild, J. A. (2002). *Instrument Reliability and Validity: Introductory Concepts and Measure*. Philadelphia :James Madison University.
- Fonagy, P., Gergely, G., Jurist, E., & Target, M. (in press). *Affect regulation and mentalization: Developmental, clinical and theoretical perspectives*. New York: Other Press.
- Frankel, G. (1992). *How to Design and Evaluate Research in Education*. 2nd Edition. New York: MC-Graw-Hill Inc.
- Gall, M and Borg, M. (1996). *Education Research: An Introduction*. New York: Longman. Government
- Holsinger, D. B. Jacob, J. W and Migumu, B. C. (2002). *Cost- Effectiveness Analysis of secondary Schools in Uganda: Comparison of Government and private schools*.

Jagero, N. O. (1999). An Evaluation of the Factors Affecting the Quality of Education in Day Secondary Schools in Kenya: A case study of Kisumu District Unpublished Masters of Philosophy Thesis, Moi University, Eldoret.

Kasomo D, PHD (2006). Research methods in humanities and education. Zapf Chancery, ELDORET, KENYA

Kitavi, M. & Westhuizen, P. (1997). *Problems Facing Beginning School Principals in Kenya*. Paper Presented in CIG Meeting in New York.

Lewin, K. M. (2004). *Anticipation and Planning Association for Development of Education in Africa*. Washington D.C: World Bank.

Lewin, K. M. (2006). *Seeking Secondary Schooling in Sub Saharan Africa Strategies for Financing: SEAI Human Development African Region*. Washington D.C: World Bank.

Lulua LR (2008). Addressing school safety in Uganda. Kampala :UPHOLD-USAID.

Republic of Kenya (2001). Ministry of education Circular No. G9/1/169 of 10th April 2001. Nairobi: Ministry of Education

McMahon, G. (1975). *Organizing and effective safety program*. In M. E. Strong (Ed.). Society.

Main, M. and Morgan, H. (1996). *Disorganization and disorientation in infant strange situation behavior: Phenotypic resemblance to dissociative states*. In L. Michelson & W. Ray (Eds.), *Handbook of dissociation: Theoretical, empirical, and clinical perspectives* (pp. 107-138). New York, NY: Plenum Press.

Mugenda and Mugenda 2008. Social science research, theories and principles, Kijabe printing press, Kenya.

Ogel, K., Tari, L. and Eke, C.Y. (2005). *Prevention of crime and violence in school*. Istanbul: New Publishing .

Oloo, M. A (2003). Gender Disparity in Students' Performance in KCSE in Mixed Day Secondary Schools in Migori District Kenya. Unpublished Masters of Education Thesis, Massena University, Maseno Kenya

Ogel, K., Tari, L. and Eke, C.Y. (2005). *Prevention of crime and violence in school*. Stanbul: New Publishing

Omolo, D.O. and Simatwa, W. (2010). 'An assessment of the implementation of safety policies in public secondary schools in Kisumu East and West District, Kenya', *Educational Research Journal*, Vol.1. (11) pp.637-649

Overstreet, S. and Braun, S. (2000). *Exposure to community violence and post-traumatic stress symptoms: Mediating factors*. American Journal of Orthopsychiatry, 70(2), 263-271.

Psacharopoulos, G. (1994). *Return to Investment in Education: A Global Update*. Washington: World Bank.

Purkey W W, Schmidt J J (1996). *Invitational Counselling: A self concept approach to Professional practice*. Pacific Grove: Brooks/Cole press

Reddy, S.R. (1992). *Effective Teachers and Teaching*. Common Wealth Publishers. New York. USA. p. 238.

Reuters (2004). Indian school fire kills 90 children. Retrieved August 6, 2007, from <http://www.Reuters.com/reports>

Rihani, M. A. (2007). *Keeping Promise: Five Benefits of Girls Secondary Education*. Washington D.C: AED Global Learning Group.

Scharff, X. (2007). *Primary School is Not Enough: Proposal for Safe and Affordable Secondary Education for Girls in Malawi*: Washington D.C: World Bank.

Scharff, X. and Brady, A. (2006). *Baseline Study: Attitudes on Girls Education in Malawi. The Advancement of Girls Education Scholarship Fund*. Washington D.C: World Bank.

Schultz, T. (1988). Education Investment and Returns: *In Hand book of Development* Elsevier Science Publishers.

Shaw M (2002). Promoting safety in schools: International experiences and actions. Crime prevention series No. 3. Bureau of Justice Assistance Monograph Washington, DC: United States Department of Justice

Simatwa EMW (2007). Management of student discipline in Secondary schools in Bungoma District, Kenya. Unpublished Ph.D Thesis, Maseno University

Smith, N.A. (1990). *Educational Psychology: A Developmental Approach*. 5th Ed. McGraw-Hill. New York. USA. p. 191.

Soomeren P (2002). Prevention of crime in and around high schools: Lessons in implementation. A paper presented at the conference on the role of schools in crime prevention. 30th September to 1st October 2002. Melbourne, Australia.

Sroufe, L. (1996). Emotional development: The organization of emotional life in the early years. New York: Cambridge University Press.

Stephen, R.D. (1995). *Safe schools: a handbook for violence prevention*. Bloomington: National educational Service Press

Squelch J (2001). Do school governing bodies have a duty to create safe schools? *An educational perspective*. Perspectives in Education,

Vermunt, j., and Verschaffel, L 2000. *Process-oriented teaching*. In R. Simons, J. Jos van der

World Bank, (2002). *Making Services Work for poor people: World Development Report*. Washington D.C: World Bank

Wright, T. (1987). *Roles of Teachers and Learners*. Oxford University Press. New York. USA. p.52

APPENDICES

Appendix I: Introduction letter

WAINAINA WINNIE WAMBUI
UNIVERSITY OF NAIROBI
COLLEGE OF EDUCATION AND EXTERNAL STUDIES
P. O BOX 92, KIKUYU

Dear Sir/Madam

RE: AN ASSESSMENT OF THE IMPLEMENTATION OF SAFETY MEASURES IN
SECONDARY SCHOOLS

I am a Masters Degree student in project planning and management in the Department of Extra Mural Studies, University of Nairobi. I am conducting a study on factors affecting implementation of safety measures in secondary schools: a case of Kikuyu District, Kiambu County.

Please fill in the attached questionnaire, which is designed to gather information on your personal experience and opinion about the topic. The information you give will be used purely for academic purposes and will be treated with utmost confidentiality and therefore do not write your name on the questionnaire.

The questionnaire is divided into two. Kindly provide information on all the items in the questionnaire. Your cooperation in promoting this study will be highly appreciated. Thanking you in advance.

Yours Faithfully,

Wainaina Winnie Wambui.

Appendix II: Questionnaire for the principals

This questionnaire is intended to help in an investigation of factors affecting the implementation of safety measures in secondary schools. A case of Kikuyu District, Kiambu County. You are kindly requested to complete this questionnaire, indicating your honest response appropriately. All information given will be absolutely confidential and your kind co-operation will be highly appreciated. To ascertain confidentiality, please do not write your name.

Please answer all the questions. Tick where appropriate.

PART ONE

1. What is your gender? Male Female
2. Please indicate your age bracket in years.
 - (i) less than 30
 - (ii) 31-40
 - (iii) 41-50
 - (iv) 50 and above
3. For how long have you been in the teaching profession?(In years)
 - 5-10
 - 10-15
 - 15-20
 - 20-25
 - Over 25
4. For how long have you been a principal?(In years)
 - Below 1
 - 1-5
 - 5-10
 - 10-15
 - 15-20
 - Above 20

5. Indicate your highest level of education

Diploma

Bachelors

Masters

PhD

6. What is the category of your school?

Day

Boarding

PART TWO

1. Have you ever heard of safety measures in schools? Yes No

2. If yes, what safety measures?

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

3. Is there any safety measures put in place in your school? Yes No

4. If yes, what measures are there?

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.....

5. In reference to (4) above, are the measures adequate? Yes No

6. If not, give reasons

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

7. As the head of the institution, what do you feel is your role in safety measures implementation?

8. In your own opinion how do you rate the following? (Tick appropriately)

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Implementation of safety measures in schools is not necessary					
Schools can afford to implement safety measures					
Disaster management training should be made compulsory					
School disasters are inevitable even with safety systems in place					
Safety policy implementation should be prioritized					
It is impossible to satisfactorily implement safety measures					
Principals have no role in implementing safety measures					

9. Have you ever attended any seminar on safety in schools? Yes No

10. If yes, how did it help you in your role of implementing safety measures in your school?

.....

.....

.....

11. Does the school organize training on safety for teachers and students?

Yes No

12. If so, how often?

Once a month

Once a term

Once a year

Others (specify).....

13. Are there safety policies in your school? Yes No

14. If yes, how do they affect implementation of safety measure in schools?

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

15. In your opinion, is the government committed towards implementation of safety measures in schools? Yes No

16. If yes, in which ways?

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

Appendix III: Questionnaire for the Teachers

This questionnaire is intended to help in an investigation of factors affecting the implementation of safety measures in secondary schools. A case of Kikuyu District, Kiambu County. You are kindly requested to complete this questionnaire, indicating your honest response appropriately. All information given will be absolutely confidential and your kind co-operation will be highly appreciated. To ascertain confidentiality, please do not write your name.

Please answer all the questions. Tick where appropriate.

PART ONE

1. What is your gender? Male Female
2. Please indicate your age bracket in years.
 - (v) less than 30
 - (vi) 31-40
 - (vii) 41-50
 - (viii) 50 and above
3. For how long have you been in the teaching profession?(In years)
 - 5-10
 - 10-15
 - 15-20
 - 20-25
 - Over 25
4. Indicate your highest level of education
 - Diploma
 - Bachelors
 - Masters
 - PhD
5. What is the category of your school?
 - Day
 - Boarding

PART TWO

1. Have you ever heard of safety measures in schools? Yes No

2. If yes, what safety measures?

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

3. Is there any safety measures put in place in your school? Yes No

If yes, what measures are there?

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

4. In reference to (4) above, are the measures adequate? Yes No

5. If not, give reasons

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

6. Have you ever had any training on implementation of safety measures?

Yes No

7. If yes, how did it help you in your role of implementing safety measures in your school?.....

.....
.....

8. As a teacher in the institution, what do you feel is your role in safety measures implementation?

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

9. In your own opinion how do you rate the following? (Tick appropriately)

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Implementation of safety measures in schools is not necessary					
Disaster management training should be made compulsory					
School disasters are inevitable even with safety systems in place					
Safety policy implementation should be prioritized					
It is impossible to satisfactorily implement safety measures					
Teachers have no role in implementing safety measures					

8 Are there safety policies in your school? Yes No

9 If yes, how do they affect implementation of safety measure in schools?

.....

.....

.....

10 In your opinion, is the government committed towards implementation of safety measures in schools? Yes No

11. If yes, in which ways?

.....

.....

.....

Appendix IV: Research report budget

Below is a summary of estimates of the total budget used in completing the research project.

ITEM	AMOUNT IN Ksh
Stationary/ Binding	10000
Printing/ Photocopying	5000
Typing/ software (SPSS) use	10000
Travel expenses	10000
Research assistants 3 @ Ksh 5000 per person	15000
contingencies	5000
TOTAL	55000

Appendix V: Time schedule

	MARCH 2012	APRIL 2012	MAY 2012	JUNE 2012
Proposal writing	■			
Pre-testing		■		
Data collection			■	
Data analysis				■
Project presentation				■