

Full Length Research Paper

An assessment of the implementation of safety policies in public secondary schools in kisumu east and west districts, Kenya

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This study investigated the implementation of safety policies in public secondary schools in Kisumu East and West Districts, Kenya. The study population consisted of 2 Quality Assurance and Standards Officers (QASOs) and 54 head teachers from 54 public secondary schools in Kisumu East and West Districts. Stratified random sampling was used to sample 30 head teachers and schools to take part in the study. A saturated sample of two QASOs was taken for the study. The instruments used for data collection included head teachers and QASOs questionnaires, interview schedules and observation schedule. Qualitative data collected from interviews was transcribed and analyzed on an ongoing process as themes and sub themes emerged. Quantitative data was analyzed by use of descriptive statistics in form of frequency counts, percentages and means. The findings of the study showed that the implementation of some safety policies was to a large extent implemented as evidenced by the following: Housing for teachers was provided in 76.67% of the schools. Dormitories in 70% of the schools had emergency doors, 17 out of 30 schools had dormitories with doors opening outwards, and 28 out of 30 schools had secure fences and gates while 96.67% of the schools had first aid kits. The study also established that some safety policies were implemented to a lesser extent as evidenced by the following cases: There was a decreasing trend in conducting fire drills, fire extinguishers were found in only 26.67% of the schools, there was crowding in 70% of the schools and 93.33% of the schools did not have enough toilets. Factors influencing the implementation of safety policies included inadequate funds, time, capacity, transport and coordination. The study found out that teachers and QASOs played significant roles in the implementation of safety policies. Head teachers' and QASOs' attitudes towards implementation of safety policies was positive. Based on these findings, it was concluded that the overall implementation of safety policies fell short of the requirements as stated in the policy circular. The implementation of safety policies was also negatively affected by factors within and outside the schools. Head teachers and QASOs had a positive attitude towards the implementation of safety policies. Based on the conclusions and findings of this study, it was recommended that: Ministry of Education should ensure that head teachers reside in schools and implement safety policies, head teachers should ensure that fire drills are conducted more regularly and that the fire extinguishers required are purchased. Head teachers should also construct and maintain adequate number of toilets and secure fences.

Keywords: Assessment, Implementation, Safety Policies, Public Secondary Schools, Kisumu East and West Districts, Kenya.

INTRODUCTION

Safety of persons is a matter of concern to all and sundry in every part of the world. In fact all organizations and

institutions of learning have safety measures put in place. All institutions of learning are viewed as havens of peace world wide (Simatwa, 2007). Notwithstanding this view, institutions of learning are reported to be experiencing serious cases of insecurity. All over the world, there has been an upward trend in the number of school children

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dying or getting injured in school violence, disasters and emergencies that would be avoided if safety policies were strictly adhered to. From the incidences of drug and gun violence in American and European schools, the 2004 Beslan School massacre in Russia to 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. Shaw (2002) in a study on international experiences and actions in promoting school safety states that new collections of exemplary, good or promising practices have been published. Data have been collected and tools developed that support effective practice. Manuals, guides and training materials have been written. A number of national, regional and international meetings have been organized by bodies such as the Council of Europe, the European Forum for Urban Security and the Australian Institute of Criminology. Each of these developments has reinforced the need to work in more collaborative, comprehensive ways in improving safety in schools. 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. These strategies recognize the multidimensional causes of school safety problems and the need for preventive long term plans that encourage partnerships between schools and other stake holders. They may also provide information necessary for funding of project development and implementation, including training and technical assistance.

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 the 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. A school survey on crime and safety (S.S.O.C.S) report states that in the 1996/1997 school year, 90% of the schools reported zero-tolerance policies for firearms. In the same period of time, schools implemented a number of approaches to enhance safety and security. Ninety six percent of public schools required visitors to sign in before entering into the school plant. Eighty percent of public schools had a closed school policy that prohibited students from leaving school premises except at specified 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 (United States Department of Education, 2004).

Cavanagh (2004) in a report on schools' responses to the threat of terrorism states that the implementation of school safety and security policies in European countries has been greatly influenced by school tragedies and near misses. The September, 2004 school hostage crisis which led to the massacre of 320 children, teachers and parents at School Number One in Beslan, Russia led to the provision of armed military personnel to guard schools. This was done to prevent future terror attacks on schools. Cavanagh (2004) further states that since the 1993 school hostage crisis in the French City of Neuilly-Sur-Seine, police authorities regularly coordinate security with school officials. Police and school officials meet at the beginning of each term to work out security details of schools. In Paris, policemen are stationed in front of public schools to provide security, maintain the traffic flow and check suspicious activities. In a discussion on the role of schools in crime prevention, Soomeren (2002) states that school safety related work in the Netherlands has focused on the safety of premises, school capacity building, bullying and improved incidence response. 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.

The partial or total lack of the implementation of school safety policies has been a cause of concern in both India and China. 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. For example, schools may stay for as long as three years without being inspected. In China, the 2001 school blast in which a storied building collapsed on school children was blamed on selective implementation of safety policies. According to CERNET (2004) various regulations governing safety in schools have since been strengthened. These include the Law on the protection of minors, the Law on Compulsory Education and the Teachers' Law. Some Chinese schools have had to cancel activities like gymnastics to reduce death and injury associated with the rigours of physical education. Chinese schools are required by law to take the responsibility for managing and protecting students in their premises. Consequently, they are required by law to buy liability accident insurances to compensate death and injuries that occur in the school premises.

In Australia, both commonwealth and state initiatives have addressed school safety issues. National crime prevention, in cooperation with other commonwealth and state partners is working to develop a consistent approach to school safety across all states and is investing in long term projects that aim to strengthen the capacity of schools, their staff and communities. A comprehensive review of school based prevention projects 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 South Africa, levels of school violence are extremely high. Shaw (2002) in a paper on international experiences and actions in promoting school safety states that there are regular reports of serious violence, gang activity, rape and sexual assaults on girls in schools. Current approaches on enhancing school safety include exemplary programs such as "Tiisa Thuto", "Crisp" and "Cass". Non-governmental organizations such as the Independent Project Trust (I.P.T) and Business Against Crime also play a role. "Tiisa Thuto" project involves developing partnerships between schools, parents, local businesses and community organizations in implementing model programs that address the needs of the individual schools. The "Crisp" project organizes school safety teams to link parents, schools, local organizations and police. In the 1990s I.P.T developed a policy which provided conflict resolution training to students, teachers and school governing bodies. However, continued safety problems led to the realization that a more fundamental approach was required. Thus the "Cass" program was consequently initiated. This is a comprehensive model involving local community partners, National government development guidelines and support material for school managers, educators and safety committees. 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. The Ugandan Ministry of Education and Sports and USAID introduced more than 200 schools to S.S.C by 2008 so as to enhance safety in schools. Stake holders identify issues; define safety, the consequences of not having a safe environment for pupils and ways to improve safety of children. They then discuss and agree on how to implement it. Through the experiences in the 200

supported schools, S.S.C offers a feasible mechanism, for promoting safety in schools through strengthening school-community partnerships and child participation.

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). In 1993, armed gangsters stormed Hawinga Girls Secondary School. The school had no perimeter fencing making it easier for the gangsters to access the school and rape students (Oriang, 2001). Gicheru (1998) states that overcrowding was one of the factors that contributed to the death of 27 girls in the 1998 Bombolulu Girls dormitory fire. Odalo (2001) stated that the absence of fire fighting equipment and emergency exits led to the high death toll during the Kyanguli Secondary School fire. Sixty eight boys lost their lives in this incident. 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 (Savula and Atsiaya, 2004). School safety policies in Kenya as indicated in the Ministry of Education Circular No. G9/1/169 (Republic of Kenya, 2001) includes requirements that:

- i. Head teachers should reside in schools.
- ii. Fire drills should be held at least twice every year.
- iii. Emergency doors should be created in dormitories and special rooms.
- iv. Safety instructions should be prominently displayed in laboratories and workshops.
- v. Dormitory windows should open outwards and be without grilles.
- vi. Dormitories should have double doors opening outwards.
- vii. Fire fighting equipment should be provided.
- viii. Regular painting and white washing of buildings
- ix. Involvement of registered professionals in site planning, design, construction and maintenance of school buildings.
- x. Regular health inspection of premises and students.
- xi. Prevention of overcrowding in classrooms and dormitories.
- xii. Classrooms should be built upwind from laboratories, kitchens and play grounds and their longer sides to run in an east to west direction.
- xiii. One toilet to be provided for every thirty students and wholesome water be provided for consumption by students.
- xiv. 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 policies in secondary schools.

Statement of the problem

In Kisumu East and West Districts, school fires had been reported at Sinyolo Girls, Muhoroni Mixed, Duha Primary, Huma Girls and Miwani Boys Secondary Schools. Attempts at arson had been made at Onjiko High and Miwani Boys Schools (Oduor and Atsiaya, 2004; Bwire and Ngumbao, 2004). A report compiled by the Kisumu Municipal Education Office, (2005) showed that certain schools required renovation, electricity, water and sanitation facilities. Priority safety and security needs included more permanent classrooms, toilets, electricity and fencing. Schools were found to lack school based health initiatives and basics such as first aid Kits. The persistent recurrence of safety problems in public secondary schools posed serious questions that demanded urgent answers if similar cases were to be avoided in future. It was therefore necessary to examine the issues of school safety with a view to establishing the extent to which the underlying policies had been implemented in Kisumu East and West Districts. In examining this problem, the following questions were asked.

Research questions

1. To what extent have safety policies been implemented in public secondary schools in Kisumu East and West Districts?
2. What factors influence the implementation of safety policies in public secondary schools in Kisumu East and West Districts?
3. What are the roles and attitudes of Head teachers towards the implementation of safety policies in public secondary schools in Kisumu East and West Districts?
4. What are the roles and attitudes of QASOs towards the implementation of safety policies in public secondary schools in Kisumu East and West Districts?
5. What strategies have been devised by head teachers and quality assurance officers to enhance the implementation of safety policies in public secondary schools in Kisumu East and West Districts?

METHODS

The study used descriptive survey research design. 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 was suitable because it sought 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 policies in Kisumu East and West District secondary schools. The descriptive survey research design enabled the exploration of the opinions, attitudes and behaviours of school head teachers and quality assurance officers on the implementation of safety policies in public secondary schools. The study population consisted of 54 head teachers drawn from the 54 public secondary schools in Kisumu East and West Districts. The two district quality assurance and standards officers (QASOs) also took part in the study.

Stratified random sampling technique was used to select 30 head teachers and their schools to take part in the study. This amounted to 55.56 % of public secondary school head teachers in Kisumu East and West Districts. According to Cohen and Manion (1997), a sample size of 30 should be the minimum number of cases where statistical analysis is to be used. A sample of 55.56 % was also above the 30 % recommended by Blanche, Durheim and Painter (2003). The stratification was based on school type as shown in Table 1. Of the 54 public secondary schools in Kisumu East and West Districts, 7 were for boys, 7 for girls and the remaining 40 were mixed schools. Since there were only two District Quality Assurance and Standards officers, a saturated sample of both was used.

The instruments of data collection were questionnaires, interview schedules and observation schedules. The head teachers' questionnaire contained two parts. Part A was used to collect general information about the school like availability of staff houses, the number of fire drills per year, the number of toilets, availability of fire extinguishers and the number of inspections since 2001. Part B had an attitude scale consisting of 10 items to gauge head teachers' attitudes towards safety policy implementation in schools. The head teachers' interview schedule was used to gather information from head teachers concerning their roles in the implementation of safety policies and information on the factors influencing safety policy implementation in their schools. Part 1 of the Quality Assurance Officers' questionnaire contained a ten item Likert type scale in which they were required to state their level of agreement or disagreement with the items. In the second part, information was required on action taken against heads who fail to comply, suggestions on how to enhance safety policy implementation and factors influencing safety policy implementation in schools. Observation schedules were used to assess the extent of the implementation of safety policies. For example, by checking whether fire-fighting devices were available, whether safety notices were prominently posted and whether emergency exits existed.

The validity of the instruments was addressed by research method experts in the Department of

Table 1. Study Population and Sample Size

Types of schools	Study population (Head teachers)	Study sample (Head teachers)	Percentage (%)
Boys	7	4	13.33
Girls	7	4	13.33
Mixed	40	22	73.33
Total	54	30	99.99

*The total percentage does not add up to 100% due to round off error.

Educational Management and Foundations. The experts were requested to review the instruments for suitability of format and content. Their recommendations were then used to improve the quality, content and the structures of the instruments. Reliability of the instruments was enhanced through a pilot study in four schools. Their responses were used to improve the instruments to ensure that they yielded consistent data. Visits were made to each sampled school and the QASOs as the need arose. The visits were for: familiarization, distribution of questionnaires, observation, interviews and collection of completed questionnaires. Follow up visits were also made whenever a need arose to clarify issues concerning one or more of the research questions. Qualitative data from interviews and questionnaires were analyzed on an ongoing process as sub themes and themes emerged. Quantitative data was analyzed using descriptive statistics in the form of frequency counts, percentages and means. These were then presented in tables for easy interpretation. The items on attitude had options with weights (*w*) as follows: Strongly Agree (SA) = 5, Agree (A) = 4, Undecided (U) = 3, Disagree (D) = 2 and Strongly Disagree (A) = 1. The scales were reversed for negatively stated items. The information was used to describe and assess the status of safety policy implementation and the mean attitude indices for head teachers and Quality assurance officers. The frequencies and percentages extracted from the analysis were used to show the distribution, extent of implementation and availability of safety equipment and specifications.

RESULTS

Question 1: To what Extent have Safety Policies been implemented in Public Secondary schools in Kisumu East and West Districts?

The first research question was to determine the extent to which specific policies had been implemented in secondary schools in Kisumu East and West Districts. Table 2 shows the extent to which some policies had been implemented as reported by head teachers.

The findings showed that 23 schools (76.67%)

had provided houses for their teachers. It was however noted that 2 head teachers did not take up residence in 2 schools despite the provision of housing. Only 20 schools had boarding facilities. Dormitories in 14 of these schools (70%) had emergency doors against 6 that did not. Eighteen out of 30 schools (60%) had safety instructions prominently displayed in laboratories and workshops. Ten boarding schools (50%) had successfully implemented the policy requiring dormitory windows to open outwards and be without grills. Seventeen boarding schools (85%) had dormitories with double doors opening outwards. By the time the study was being conducted, 18 (60%) schools out of 30 had painted or white washed their buildings within the stipulated period.

There were first aid kits in 29 schools (96.67%). Only one school did not have first aid kits in school buildings. Eight (26.67%) out of 30 schools had fire extinguishers against 22 that did not have. A total of 38 fire extinguishers were found in the 8 schools. This number falls far below the projected demand of 137 fire extinguishers. Twenty head teachers (66.67%) used professionals in site selection, development and maintenance of school infrastructure. Twenty two schools (73.33%) had been inspected at least once in the preceding year. Eight schools had not been inspected in the same period. Crowding was evident in classrooms and dormitories. Only 10 schools (33.33%) had the required number of students per class. The other 20 schools had student numbers exceeding the required limit of 40 students per class. Head teachers acknowledged that there was crowding in 70% of the boarding schools where there were more boarders than the capacity of the dormitories.

Twenty one schools (70%) had buildings with the longer sides running in an east to west direction. Only 2 schools (6.67%) complied with the requirement that 1 toilet be made available for the use of 30 or a fewer number of students. Twenty eight (93.33%) out of 30 schools had perimeter fences and secure gates with security personnel against 2 (6.67%) that did not. School water was sourced from rain water catchments, bore holes, streams and mains water supplies. Water from bore holes was considered safe, warranting no need for further treatment. One school treated water at a central

Table 2. The Extent of Safety Policy Implementation in Public Secondary Schools as reported by head teachers (n=30)

Policy	Implemented		Not implemented	
	Frequency (F)	Percentage (%)	Frequency (F)	Percentage (%)
Provision of housing for teachers.	23	76.67	7	23.33
Emergency doors created in dormitories.	14	70	6	30
Display of safety instructions in the school.	18	60	12	40
Dorm windows opening outwards without grills.	10	50	10	50
Double doors opening outwards in dormitories.	17	85	3	15
Painting and white washing of buildings within the year.	18	60	12	40
Availability of first aid kits in special rooms.	29	96.67	1	3.33
Availability of fire extinguishers in buildings.	8	26.67	22	73.33
Use of professionals in site selection and construction.	20	66.67	10	33.33
Regular health inspection of the school plant.	22	73.33	8	26.67
Prevention of crowding in dormitories and hostels.	10	33.33	20	67.67
At least 40 students per class room.	10	33.33	20	66.67
Class rooms put up in an East to west direction.	21	70	9	30
Provision of 1 toilet for at least 30 students.	2	6.67	28	93.33
Perimeter fence with secure gate and watchman.	28	93.33	2	6.67

point, 7 schools regularly used treatment chemicals in water storage tanks while 16 schools had protected bore holes. Data on fire drills conducted in the schools show an increase from 0 in 2001 to a peak of 7 in 2003. In 2002, only 2 schools conducted a fire drill while in the year 2004 the number was 3. In the years 2005 to 2006 no school conducted a fire drill at all.

Question 2: What Factors influence the Implementation of Safety Policies in Public schools in Kisumu East and West Districts?

Head teachers and QASOs were asked to state the factors influencing the implementation of safety policies in public secondary schools in Kisumu District. The responses of head teachers were as stated in Table 3.

The factors influencing the implementation of safety policies as stated by QASOs included: Inadequate funds (86.67%); late school fees remittances (30%); low

enrolments (6.67%); inadequate time (10%); inadequate capacity (26.67%) and lack of coordination from the M.O.E (6.67%).

The two district QASOs were also asked to state the factors influencing the implementation of safety policies in Kisumu East and West Districts. Their responses are stated in Table 4.

As shown in Table 4, the factors influencing safety policy implementation as stated by QASOs included logistical reasons (100%), uncooperative head teachers (100%), negative perception by head teachers (50%), failure by seniors to act on recommendations (50%), inadequate time (50%) and inadequate financial resources (100%).

Table 3. Factors Influencing the Implementation of Safety Policies as stated by Head teachers (n=30)

Factors	Frequency (F)	Percentage (%)
Inadequate funds with which to implement all the safety policies at once.	26	86.67
Late remittance of school fees long after the student has completed course and left school.	9	30
Low enrolments of students making the schools economically unviable to run.	2	6.67
Inadequate time (Period between onset of policy and time of assessment not enough to implement all the safety policies).	3	10
Inadequate technical capacity to implement the safety policies due to lack of skills or interest.	8	26.67
Lack of coordination from the M.O.E with schools not receiving safety circulars late or not at all.	2	6.67

Table 4. Factors Influencing the Implementation of Safety Policies as stated by QASOs (n=2)

Factors	Frequency (f)	Percentage (%)
Logistical reasons including inadequate means of transport and the remoteness of some schools making them inaccessible during certain seasons.	2	100
Uncooperative head teachers who fail to follow safety instructions, avail records and give the required information in time.	2	100
Negative perceptions by some head teachers who feel that QASOs are out to find fault.	1	50
Failure by seniors to act expeditiously on recommendations made by QASOs.	1	50
Inadequate time to conduct inspections, compile reports and perform other duties.	1	50
Inadequate financial resources to facilitate their chore function of school inspections as they have to rely on the district education office.	2	100

Question 3: What are the Roles and Attitudes of Head teachers towards the Implementation of Safety Policies in Public Secondary Schools in Kisumu East and West Districts?

Head teachers were asked to explain the role they played in the implementation of safety policies. Findings from the structured interviews showed that some of their roles included residing in schools and implementing safety policies, monitoring and evaluating the school plant to ascertain safety needs, appointing safety committee members and promoting a school safe zone culture. Other roles included repairs maintenance and improvement of school plant to make it safer, coordinating and planning safety activities, involving stakeholders in the implementation of safety policies and disseminating reading materials on safety. A ten item Likert type scale was administered to 30 head teachers to determine their attitudes towards safety policy implementation. The responses of the head teachers were as shown in table 5.

The statement with the highest score against it was the one that stated that: Implementation of safety policies in schools is not necessary at 129 out of a possible 150 points. The one with the lowest score was: schools should seek external funds to implement safety policies. The average percentage score on safety for head teachers was found to be 75.07%. This score was way above average and implied a positive attitude.

Question 4: What are the Roles and Attitudes of QASOs towards the Implementation of Safety Policies?

In responding to this question, QASOs stated that they played the following roles in the implementation of safety policies in Kisumu East and West District secondary schools as shown in Table 6.

A Likert type scale was administered to QASOs to determine their attitudes towards the implementation of

Table 5. Head Teachers' Attitudes towards the Implementation of Safety Policies (n=30)

Item	Scores					
	SA	A	U	D	SD	Total
Schools can afford to implement safety policies.	65	28	6	10	3	112
Implementation of safety policies in schools is not necessary.	2	4	3	20	100	129
Schools should seek external funds to implement safety policies .	6	20	9	12	65	102
Disaster management training should be made compulsory.	55	32	3	14	3	107
Schools should conduct fire drills more regularly.	65	36	6	4	4	115
Safety policy implementation is import to teachers and students.	75	28	0	10	3	116
School disasters are inevitable even with safety systems in place.	2	6	6	32	75	121
Safety policy implementation should be prioritized.	50	27	15	8	2	111
It is impossible to satisfactorily implement safety policies.	6	8	3	32	55	104
Professionals have no role in implementing safety policies.	3	16	12	36	50	109
Grand Totals						1126

The Average Percentage score = 75.07%. KEY: SA=Strongly Agree; A=Agree; U=Undecided; D=Disagree; SD=Strongly Disagree

Table 6. Roles of QASOs in the Implementation of Safety Policies as Indicated by QASOs (n=2)

Roles	Frequency	Percentage
	(F)	(%)
Give ultimatum for implementation of safety policies like buying fire extinguishers and first aid boxes.	2	100
Recommend the redeployment of defaulting head teachers to lower positions with fewer responsibilities.	1	50
Recommended disciplinary action including interdiction, suspension or transfer of defaulting head teachers.	1	50
Made follow up visits to schools to remind defaulting head teachers that government policies have to be implemented.	1	50
Provided defaulting head teachers with safety policy implementation guidelines (Circular No. G9/1/169/2001).	1	50

safety policies. QASOs responses were as shown in Table 7.

The findings indicated that two statements had the highest scores (10) against them. These were: QASOs have a role in the implementation of safety policies and Teachers, BOGs and students should be trained on safety policy implementation. The lowest score of 3 was against the statement: Implementation of safety policies is a responsibility of the government. The average percentage score for QASOs was 70%. This was above average score and implied a positive attitude towards the implementation of safety policies.

Question 5: What Strategies have been devised by head teachers and QASOs to enhance the Implementation of Safety Policies in Public Secondary Schools in Kisumu East and West Districts?

In responding to this question, head teachers stated the strategies they had devised to enhance the

implementation of safety policies. Their responses were as shown in Table 8.

As shown in Table 8, the strategies devised by head teachers to enhance the implementation of safety policies included: Integrating safety activities into daily school routine (20%); regular inspection of school plant (36.67%); training staff on emergency preparedness (10%); purchasing the required safety equipment (50%); employing a nurse (23.33%) and conducting regular emergency drills (3.33%)

The strategies stated in Table 9 were devised by QASOs to enhance the implementation of safety policies in Kisumu East and West Districts.

Several strategies were devised by QASOs to enhance the implementation of safety policies. Organizing seminars and workshops on safety implementation was stated by 2 (100%), motivating compliant head teachers by 2 (100%), recommending compliant head teachers for promotion by one (50%), facilitating the provision of funds for purchase of safety equipment by one (50%), providing better communication between stakeholders by 2 (50%)

Table 7. Attitudes towards Safety Policy Implementation as Stated by QASOs (n=2)

Item	SA	A	U	D	SD	TL
QASOs have a role in implementing school safety Policies.	10	0	0	0	0	10
I have done my best in enforcing implementation of safety policies.	0	8	0	0	0	8
Schools in my area have successfully implemented safety policies.	0	2	0	4	0	6
Implementation of safety policies is a responsibility of schools.	0	4	0	0	0	4
Implementation of safety policies is a responsibility of the government.	1	2	0	0	0	3
QASOs should be trained on school safety policy implementation.	5	4	0	0	0	9
Teachers, B.O.Gs and students should be trained on safety policy implementation.	10	0	0	0	0	10
I have not faced any challenges in enforcing safety policy implementation.	0	0	0	4	0	4
I rarely visit schools to enforce safety policy implementation.	0	0	0	8	0	8
I feel that schools in my area are safe.	0	0	0	8	0	8
Grand Total						70

The average percentage score = 70%

KEY: SA=Strongly Agree; A=Agree; U=Undecided; D=Disagree; SD=Strongly Disagree; TL=Total

Table 8. Head Teachers' Strategies for enhancing the Implementation of Safety Policies as indicated by head teachers (n=30)

Strategy	Frequency (F)	Percentage (%)
Integrating safety awareness into daily school routine like class time and games time.	6	20
Regular evaluation of school plant to determine safety needs through regular checks/inspections.	11	36.67
Training of teaching and non teaching staff on emergency preparedness and first aids skills.	3	10
Purchasing safety equipment like first aid boxes and fire extinguishers in adequate numbers.	15	50
Employ a nurse to deal with medical emergencies in the school at all times.	7	23.33
Conduct regular fire and emergency drills for students and staff.	1	3.33

Table 9. Strategies for the enhancement of Safety Policy Implementation as Stated by QASOs (n=2)

Strategy	Frequency (F)	Percentage (%)
Organize seminars and workshops on school safety implementation for head teachers and other stakeholders.	2	100
Motivate compliant head teachers with cash incentives, vouchers, certificates of recognition and honorary awards.	2	100
Recommend the promotion of compliant head teachers to higher job groups or deployment to senior schools.	1	50
Facilitate the provision of funds for the purchase of safety equipment like fire extinguishers.	1	50
Provide better communication and coordination on safety policy implementation between schools, M.O.E and stakeholders.	1	50
Go for regular in-service training on school safety and implementation procedures.	1	50

and going for regular in-service courses on safety implementation by 2 (50%)

DISCUSSION

The implementation of safety policies was to a large extent satisfactory in most of the public secondary schools in Kisumu East and West Districts. However no single policy achieved a 100% implementation in any of the schools. Provision of housing for head teachers had been done in most schools even though some head teachers failed to make use of these houses. This beats the purpose for the provision of the houses in the first place. From the year 2004 to 2006, there was a downward trend in conducting fire drills. This reflects a sudden change in the perception of head teachers towards fire safety and preparedness as compared to the previous years. The significance of fire drills in a school set up should never be downplayed. According to Comolotti (1999) school fire drills prepare students for what they need to know in case of fire outbreak. They also allow students and teachers to plan their escape in advance and to address learners' safety issues.

Students spend a considerable length of time in dormitories and classrooms. These buildings should therefore be put up according to policy specifications in order to avoid situations that would compromise the safety of the occupants. Fifty percent of the schools had dormitories with windows opening outwards and without grilles. Eighty five percent of the schools had dormitories with double doors opening outwards to allow for the free flow of evacuees in case of emergencies. Dormitories and hostels are also required to be fitted with emergency doors. The findings showed that the implementation of this policy had been achieved in a majority of the schools. Emergency exits are essential in dormitories, laboratories and halls as they provide alternative egress during emergencies. The high level of the implementation of this policy in some schools is commendable and should be replicated in others to enhance the overall safety of the schools. The policy requiring that qualified professionals be used in sight planning, construction and maintenance of school buildings is a safeguard against quacks that are likely to put up unsafe buildings that endanger the lives of learners. In the recent past, Kenya has witnessed an increasing number of buildings collapsing due to poor workmanship by unqualified artisans. To avoid the occurrence of such incidents in schools, the 10 head teachers who were found to have contravened this requirement should in future engage qualified and registered professionals in the construction and maintenance of school structures.

The posting of safety instructions in 18 schools is an indication that safety is taken seriously in these schools. Special rooms like laboratories, workshops and home science rooms should each have first aid kits. According

to the Red Cross Society (2008), a First Aid Kit is a set of medicines and equipment for providing basic treatment in emergencies. First aid kits are essential in routine daily life as there are chances for accidents to occur when people least expect them. It is advisable to have first aid kits in schools so that students and staff can be equipped to face any circumstance that requires urgent care. A first aid kit can make the difference between life and death especially before proper medical attention can be obtained. Availability of first aid kits shows that a school is prepared for emergencies. Only 8 schools in Kisumu East and West Districts had fire extinguishers. A total of 38 fire extinguishers were found against a projected demand of 137. This raises serious doubts about fire safety preparedness in Kisumu East and West District Public Secondary Schools. Having fire extinguishers and training staff on how to use them is one important precaution against fire related disasters. These findings agreed with those of Gikandi, Ogutu and Obwocha (2006) who reported that while some schools had installed fire extinguishers at strategic places like dormitories study rooms and administrative block, others had not done this. The provision of fire extinguishers in most schools is a step in the right direction; however there is need to keep them serviceable. As Makabila, Ayodo and Ringa (2006) found out, a majority of boarding schools have old fire extinguishers, which had not been serviced. This puts to doubt their usefulness in a fire outbreak.

School buildings should be painted or white washed regularly. Painting has both aesthetic as well as public health values. Schools that are newly painted look neat and habitable. Schools that have tarnished, peeling and fading paint look dilapidated and unhygienic, giving a negative impression about the management and the mission of the school. Compared to other policies, it appears insignificant. However Lady (2009) points out that painting and white washing, apart from being effective anti-microbial are effective and cheap ways to renovate school buildings.

School safety policies require that premises and students be inspected at least once a year. Twenty-two schools had been inspected in the past 12 months preceding the study. This is commendable. However 8 schools had not been inspected. Head teachers of schools that have not been inspected should invite officers from the District Quality Assurance and Standards office to conduct inspections. Inspection reports are a useful starting point for school safety needs assessments. Ahinduka (2005), in a study conducted in Kisumu Municipality, similarly found out that a majority of schools were inspected at least once every year. The findings provide evidence that a significant number of schools are inspected each year, but a few go uninspected. The failure to inspect some of the schools may impact negatively on safety and security matters in such schools. Further to this, it is important to note that

some of the inspections conducted in schools are panel and subject inspections meant to enhance the quality of teaching and learning rather than to evaluate the physical and environmental soundness of the school plant.

Over crowding was a major problem in public secondary school classes as well as dormitories. This poses serious public health and safety risks. Crowding was found to be a major cause of death due to stampedes in fire incidents (Odalo, 2001 and Siringi, 2001). The unprocedural conversion of structures meant for other uses into dormitories was also noted. School authorities should peg admission to bed space to avoid the risks associated with over crowding. Classrooms should be built in such a way that the longer sides with windows run in an east to west direction to avoid exposing the learners to the sun's harmful radiation and glare. Nine schools posed danger to learners in so far as they failed to comply with this policy.

The student to toilet ratio of 30:1 was exceeded in 28 of the schools. At 93.33% failure rate, this is one of the policies that have been grossly ignored by a majority of schools despite the fact that provision of sanitation facilities has implications on access and quality of learning. The results concurred with the findings of UNESCO (2005) and Aketch and Simatwa (2010) who found out that the inadequate provision of toilets was a serious challenge in implementing free primary education. It is therefore evident that inadequate provision of sanitation facilities is a problem that cuts across both primary and secondary schools.

The sources of school water are important aspects of school safety and health. One of the greatest determinants of school health is the type of water consumed by the students teachers and support staff in a school. All the schools had taken care to provide at least one safe source of water. These included water from mains supplies, roof catchments and protected boreholes. Schools should ensure that the sources of water are at least 15 meters away from pit latrines to avoid contamination. All schools took some precautions in handling water meant for human consumption. They either treated their water or protected their water sources from possible contaminants. This was to avoid outbreaks of water borne diseases like the one that broke out in Chesamisi High school in the year 2004 (Kasumba, 2004). The school's main source of water, a stream was confirmed to have sparked off the outbreak, which resulted in the death of seven students and the hospitalization of three teachers. Water and sanitation are very important aspects of school safety and health. It is therefore incumbent upon school heads to ensure that water is safe for use by students.

Two schools had no gates or fences against 28 that had. Perimeter fence security and safety in schools should always remain on the agenda of schools due to its sensitive nature. Head teachers have a basic requirement to safely contain children under their care

during school hours and at night. This cannot take place when schools have no fences or have weak and inadequate fences prone to intrusion. At night, the school needs to lock down to deter acts of vandalism, theft, concealment or arson. While fences are not 100% tamper proof, they define the extent of the school plant and act as a deterrent to intruders. A strong and sturdy fence is symbolic of a safe and secure school.

Inadequate funds were by far the most significant factor influencing the implementation of safety policies. A majority of head teachers (86.67%) and QASOs (100%) stated it as influencing the implementation of safety policies. The implementation of safety policies involves extensive modification of existing buildings, the purchase of expensive safety equipment and fittings and capacity development at all levels. Without adequate funds, all the safety policies may not be implemented at once. Low enrollments of students in two schools, on the other hand was the least significant because it was only cited as a factor influencing the implementation of safety policies by 6.67% of the respondents. A low enrollment of students was a factor because schools with low enrollments have low turnovers, making them unviable. Inadequate communication and coordination of stakeholders on safety issues was also cited by both QASOs and head teachers as influencing the implementation of safety policies. Maoulidi (2008) similarly found out that lack of regular communication to sensitize the various stakeholders on their roles hampers smooth implementation of policies in Kisumu City. Rugut (2003) observed that QASOs were inefficient in their jobs and did not disseminate new policies of the ministry of education. This explains why some head teachers felt uncoordinated and without the guidance and support of QASOs, which is necessary for the implementation of safety policies.

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. As being in *in locos parentis* they had to ensure that the schools were made safe for the learners. QASOs were found to play an advisory and supervisory role in the implementation of safety policies. They were the main link between the Ministry of Education, schools and all the stakeholders. Without their input, implementation of safety policies in schools would be haphazard and uncoordinated. The overall safety attitude scores for both head teachers and QASOs were found to be above average. Head teachers scored 75.07% while QASOs scored 70%. This implied that head teachers and QASOs had positive attitudes towards the implementation of safety policies.

Most of the head teachers (36.67%) cited regular evaluation of the school plant to determine safety needs as a strategy for enhancing the implementation of safety policies. This was done through regular checks and internal inspection of school buildings and students. The

safety short falls would then be attended to on an ongoing process. Conducting regular fire and emergency drills was only stated by one head teacher as a strategy for enhancing the implementation of safety policies. Regular drills prepare students for what they need to know in case of a fire or any other school emergencies. They also allow students to plan their escape in advance. The purchase of safety devices and the retention of a trained nurse in the school equip the school to handle fire and medical emergencies should they arise.

QASOs provide supervisory and advisory roles to head teachers on issues of school safety and security among other things. Any strategy they devise to enhance the implementation of safety policies must be realistic, achievable and acceptable to stake holders. Otherwise such strategies would fail. The strategies must also fall within the legal framework of the Department of Quality Assurance and Standards. The strategies of organizing workshops and going for training helps to build capacity that enables teachers and QASOs to cope with the new and expanded demands of their jobs. The importance of training is emphasized by Torrington, Hall and Taylor (2005) who posit that training increases awareness of the rules, improving self-confidence and self-discipline. There will be new working procedures or new equipment from time to time, and again training will reduce the risk of safety offences, negligence or unreliability.

Head teachers, like any other employees require some form of appreciation from QASOs for work well done. Employee recognition ensures a positive productive and innovative organizational climate. It also encourages attitudes and actions that make the organization successful. Head teachers who excel in the implementation of safety policies should be recognized. The findings showed that the QASOs had developed the recognition of compliant head teachers as a strategy in enhancing the implementation of safety policies. This was done through recommendation for promotion, motivation, awards, better coordination and the provision of funds for the purchase of safety equipment. Awards, promotions and recognition act as motivators which give impetus to the desired behaviour by arousing, sustaining and directing it towards the attainment of the desired goals (Wortman et al., 1999). Motivation gives impetus to head teachers to continue excelling in the implementation of safety policies in their schools. This would lead to higher levels of safety policy implementation.

CONCLUSION

The study set out to establish the extent to which safety policies had been implemented in Secondary schools in Kisumu East and West Districts. The findings showed that a majority of schools had some what implemented most safety policies in their schools.

No single school was found to have implemented all the requirements on school health and safety. Even a simple safety policy like the provision of first aid kits in special rooms was found to have been ignored in a certain school. Based on these findings, it was concluded that safety policies may not attain perfect implementation due to factors in the school and outside the school. As soon as one policy objective was met, other safety needs emerged. Safety policy implementation was therefore a continuous rather than a terminal process.

It was concluded that the unsatisfactory implementation of safety policies was attributable to a variety of factors. These included inadequate time, inadequate funds, low enrolments, low technical capacity and negative perceptions by head teachers. Based on these findings, it was concluded that the implementation of safety policies in Kisumu East and West Districts secondary schools would have been much better if these factors would have been put in place. The findings of the study showed that head teachers had important roles to play in the implementation of safety policies in schools. With schools facing increased pressure to improve quality, the roles and responsibilities of head teachers were found to have expanded. New management roles shifted considerably to include the responsibilities of managing the various aspects of school safety. From these findings, it was concluded that the implementation of safety policies largely depended on the attitude and roles of the head teacher. Implementation of safety policies would not succeed unless the head teachers considered them significant enough to find value in. When head teachers were supportive of implementation programs, then these programs were likely to succeed.

Another conclusion of the study was that QASOs played supervisory and advisory roles in the implementation of safety policies in schools. However implementation gaps still existed in some schools. The conclusion was that QASOs did not play their roles strictly and effectively, giving rise to implementation gaps in some schools. QASOs were found to have a positive attitude towards the implementation of safety policies. The mean safety attitude score for QASOs was 70%. This was lower than that of head teachers which was found to be 75.07%. It was concluded that QASOs had a less favourable disposition towards safety policy implementation than head teachers as shown by the difference in their mean attitude scores. However these impressive scores were not translated into better results on the ground as shown by the high number of implementation gaps in some schools. It was concluded that head teachers had the desire to implement safety policies but were constrained by a raft of challenges. Head teachers and QASOs were found to have devised strategies to enhance the implementation of safety policies. These included regular inspection, capacity building, purchase of safety equipment, motivation of staff

and regular fire drills. Based on these findings, was concluded that head teachers and QASOs were aware of and were concerned about the level of safety policy implementation and had come up with ways of ensuring that the outcomes are scaled up. With the strategies in place, it was expected that the level of disaster preparedness would increase in Kisumu East and West Districts Secondary Schools.

RECOMMENDATIONS

In light of the findings and conclusions of this study, it was recommended that: All head teachers reside in schools and implement safety policies, ensure that emergency drills are conducted regularly to enhance preparedness and purchase the required number of first aid kits and fire extinguishers. Head teachers should also ensure that school water is made safe through treatment and filtration, construct and maintain fences to enhance school safety and facilitate a greater involvement of all the stake holders to ensure a collaborative approach to the implementation of safety policies.

The Ministry of Education on the other hand should ensure that head teachers peg admission to bed/class space to avoid crowding in schools, provide all schools in Kisumu East and West Districts with funds to implement safety policies merge unviable schools and improve on the coordination and follow-up of all the stake holders in the safety policy implementation process. Finally, the QASOs should provide increased motivation to compliant head teachers teachers, conduct regular health inspections of all the schools, organize safety training for teachers and improve on their approach when they visit schools by being more humane and interactive.

The study dealt with the implementation of safety policies in public secondary schools in Kisumu East and West Districts. It is recommended that further research be carried out: To find out students' perceptions on safety and security in schools, to examine the roles of students in the implementations of safety policies, to determine the roles and attitudes of parents and teachers towards the implementation of safety policies in schools and to evaluate the impact of safety policy implementation on the outcomes and quality of learning.

REFERENCES

- Ahindukha K (2005). Factors, trends and effects of teacher attrition on students' performance in secondary schools in Kisumu City, Kenya. Unpublished Master of Education Thesis, Maseno University.
- Akech BAO, Simatwa EMW (2010). Opportunities and challenges for public primary school head teachers in the implementation of free primary education in Kisumu Municipality, Kenya: An analytical assessment. *Educ. Res. Rev.* 5(9): 484-491
- Blanche TM, Durrheim K, Painter D (Eds) (2006). *Research in Practice*: Cape Town: University of Cape Town Press.
- Bwire B, Ngumbao K (2004). Rising from the Ashes. *Daily Nation*. Nairobi: Nation Media Group. p. 12
- Cavanagh S (2004). Schools abroad brace against terrorism. *Education*

- Week 6th October, 2004. Retrieved July 19, 2005, from <http://www.edweek.org>.
- CERNET (2004). Who is to blame for school deaths? Retrieved March 18, 2006, from <http://www.edu.cn>
- Cohen L, Manion L (1997). *Research methods in education*. London: Routledge
- Comolotti J (1999). The importance of school fire drills. Retrieved November 6, 2009, from <http://www.fa.com>
- Gicheru C (1998, March 28). These disasters can be averted. *Daily Nation*, Nairobi: Nation Media Group. Pp. 2
- Gikandi B, Ogutu E, Obwocha E (2006). Others are wary of playing with fire. *The Standard*. Education. Pp. 4.
- Kasumba M (2004). How war on swamp fever was executed. *East African Standard*. Pp. 12, 13
- Lady S (2008). Importance of painting. Retrieved May 28, 2009 from <http://www.survivalady.com/?>
- Lulua LR (2008). Addressing school safety in Uganda, Kampala :UPHOLD-USAID.
- Makabila S, Ayodo H, Ringa M (2006). Putting out school fires. *The Standard*. Nairobi: Standard Group
- Maoulidi M (2008). Education needs assessment for Kisumu City, Kenya. Columbia Earth University: Millennium Cities Initiatives
- Mugenda O M, Mugenda A G (2003). *Research methods: Quantitative and Qualitative approaches*. Nairobi: Acts Press
- Municipal Education Office (2006). *Inspection Reports for Kisumu Municipality*, 2005. Unpublished report.
- Mwanzia M, Mugo W, Ngamau M (2006). Putting out fires in schools. *The Standard*. Education, Nairobi: Standard Group. Pp. 4.
- Odalo B (2001). Sixty eight dead. *Daily Nation*. Nairobi: Nation Media Group. Pp. 1.
- Oduor A, Atsiaya P (2004). Two fire attacks fail to break school's spirit. *East African Standard*. Schools & career Nairobi: Standard Group. Pp. 4.
- Oriang' L (2001). Taking charge of the welfare of our children. *Daily Nation*, p. 5. Nairobi: Nation Media Group
- Red Cross Society (2008). Importance of First Aid Kits. Retrieved from www.firstaid.com
- Republic of Kenya (1999). *The Report on the Totally Integrated Quality Education and Training*. (TIQET). Nairobi: Government Printer.
- Republic of Kenya (2001). Ministry of education Circular No. G9/1/169 of 10th April 2001. Nairobi: Ministry of Education.
- Republic of Kenya (2008). *The safety standards manual for schools in Kenya*. Nairobi: Church World Service.
- Reuters (2004). Indian school fire kills 90 children. Retrieved August 6, 2007, from <http://www.Reuters.com/reports>
- Rugut JE (2003). Teachers, Inspectors and Education officers' perceptions of the expected roles of peer supervisors in Kenyan primary schools. A case study of Nandi District. Unpublished Master of Philosophy Thesis. Moi University.
- Savula A., Atsiaya P (2004). Grilles order to school heads. *The Standard* p.4. Nairobi: Standard Group
- 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.
- Siringi S (2001). Is there recourse in Law for Parents? *Daily Nation*, p.5. Nairobi: Nation Media Group
- 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.
- Torrington D, Hall L, Taylor S (2005). *Human resources management*. Essex: Prentice Hall
- UNESCO (2005). *An evaluation of the FPE in Kenya*. Paris: UNESCO
- United States Department of Education (2004). *Annual report on school safety*. Retrieved April 14, 2006, from <http://www.ed.gov/schoolsafety/>.
- Wortman C, Loftus E, Weaver E (1999). *Psychology*. Boston: McGraw Hill.