

INFLUENCE OF IN-SERVICE TRAINING PROGRAMS ON PROVISION OF SAFE LEARNING ENVIRONMENT IN PUBLIC SECONDARY SCHOOLS IN MAKUENI COUNTY, KENYA

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ABSTRACT

Purpose of Study: The study investigated the influence of in-service training on the provision of safe learning environments in public secondary schools in Makueni County, Kenya.

Statement of Problem: Despite the critical role of in-service training in equipping educators and school managers with relevant skills, accidents involving learners continue to be reported in public secondary schools in Makueni County. These incidents, which include injuries to students and staff as well as recurrent damage to school facilities, raise concerns about the effectiveness and regularity of training programs in fostering safe learning environments.

Methodology: The study adopted a mixed-methods design anchored on Maslow's Hierarchy of Needs Theory, combining descriptive survey and phenomenological approaches. Data were collected using questionnaires, interviews, and document checklists, and analyzed through SPSS v29 and thematic techniques.

Results: The findings showed that provision of safe learning environments remains a significant challenge in many schools, with frequent reports of accidents, injuries, and damage to facilities. This was partly attributed to irregular and inadequate in-service training programs on areas such as safety procedures, conflict management, and emergency preparedness.

Conclusion: The study concluded that irregular in-service training limits the ability of schools to provide safe learning environments, thereby increasing risks to both students and staff.

Recommendation: The study recommends that principals should institutionalize regular and specialized training sessions focusing on conflict resolution, mental health awareness, and emergency preparedness to improve safety standards in schools.

Keywords: *in-service training, safe learning environment, secondary schools, Makueni County*

INTRODUCTION

A safe learning environment is an integral and indispensable component of the teaching and learning process. Actually, no meaningful teaching and learning can take place in an environment that is unsafe and insecure to both learners and staff. Good governance practices are essential for the success of any school. It is therefore important that school administrators facilitate safe and secure school environment. A safe and secure school environment enhances quality teaching and learning in educational institutions (Maxwell, Reynolds, Lee, Subasic & Bromhead, 2017).

According to Arum (2019), if students feel unsafe in school, they are less able to concentrate in class and perform poorly in assessments because feelings of safety are positively related to both behavioral and academic outcomes. This corroborates the assertions of Lussier and Fitzpatrick (2016) that a safe school is the foundation of a good education because when students feel safe, they learn better, teachers can become more effective when they know students are under control and can concentrate on their work. Although learning institutions provide security to staff and learners, many learning institutions around the world are experiencing potential threats to students' and staff safety (UNESCO, 2018).

The United States of America has established a guide for prevention and response to school safety (Federal Government of the United States of America, 2016). These include training school personnel on how to detect, prevent and respond to a violent individual within a school environment, security controls such as access controls, security procedures such as lock down and evacuation as well as rapid response to an incident in schools (Janel, 2017). In Spain, Díaz-Vicario and Sallán (2017) explored the concept of safety in learning institutions. It was noted that creating safe and healthy environments was not always an explicitly endorsed principle or

goal for schools. However, all members of the educational community were involved in ensuring adequate levels of school safety and diverse management.

Organizational actions and measures were implemented to ensure physical, emotional and social safety which consequently influenced teaching and learning processes in schools. Van Jaaveld (2011) opined that there is a deep-rooted culture of violence in South African schools that has made schools unsafe and insecure. In response to school safety concerns, the Ministry of Education has developed safety measures and policies to be implemented by schools to improve school safety. Obegbulem (2011) affirms that, to overcome or minimize student mortality and injury rates in learning institutions, school administrators are mandated to plan, organize and facilitate communication and training on safety measures.

Sekiwu and Kabanda (2014) assert that several hazards in schools are attributed to failure to implement safety policies in Uganda. They established that school fires cost the lives of 20 students and two adults, thus the Minister for Education and Sports reported that the Inspector General of police had identified lack of safety provisions as being the main contributing factor to this disaster.

Kenya has a history of tragic school safety incidences blamed on failure to implement safety policies. Cases of mortality rates attributed to failure of implementing safety standards have been on the rise and, thus the Ministry of Education compiled a Safety and Standards Manual for use in all Kenyan schools Ministry of Education, 2018). The Safety and Standards Manual comprises of the following safety issues: safety in physical infrastructure, safety in school environment, health and hygiene safety, food safety, safety against alcohol, drug and substance abuse, safety in teaching and learning environments, social-cultural environment of the school, safety of children with special needs, safety against child abuse, transportation safety, school community relations and safety on school grounds (MoE, 2008).

The Manual embraces diverse issues that have influence on the safety of learners, personnel, parents and the catchment communities around the schools. Nthenya (2011) contends that in 2001, 68 students died at Kyanguli Secondary School in the then Machakos District due to dormitory fire. The deaths were attributed to lack of emergency exit doors and overcrowded dormitories. The death of eight girls at Moi Girls' High School in 2017 in Nairobi County was attributed to overcrowded dormitories and lack of fire extinguishers (Achuka, 2017). Cherono (2018) reported that seven students were injured at Jamhuri High School in Nairobi which was attributed to a religious related confrontation that broke out among the students. This is an indication that school safety is a national concern.

Daily Nation Wednesday, June 29, 2022 contends that thirteen Kakamega High School students were injured after they fell from the first floor of a building block as they left their classrooms. The injuries were attributed to a commotion that ensued when two students who tugged each other were pushed and the steel guard rails on the stairs came off the stairs to the ground. The safety of the structure and design of the guard rails was questionable. The Daily Nation Newspaper of 4th Feb 2022 indicated about the stampede in Kakamega Primary school, in Kenya's Western region, where fourteen school children, nine girls and five boys died and dozens were critically injured. Some attributed the cause of the stampede to the pupils being barred from using one of the two stair cases in the building, which had been reserved for parents creating a surge. This questioned the safety of the learners in the three-storey building with respect to compliance of safety standards. This is an indication that school safety is a national concern.

In Makueni county, fire razed down a Maiani Girls mega dormitory in Mukaa sub-county where nothing was salvaged, however, no injuries were reported (Education News, 29th May 2021). A similar incident had earlier been reported in Mukaa Boys High School that left a

dormitory in ashes and a consequent torching of two cubicles in another dormitory (Education News, 29th May 2021). KBC Nyaga (2021) reported about a 132-bed capacity dormitory that was burnt at Makindu Boys Secondary School in Makindu Sub-county, Makueni County where 7 students were found culpable. Teachers have an integral role in school safety because they are charged with the responsibility of helping students because they are in charge of classrooms full of students.

When an act of violence, terror or natural disaster occurs, teachers must be able to recognize threats, provide proper guidance should an attack take place or appropriately respond and address issues in the aftermath. It is imperative that they (teachers) be properly trained and confident in their ability to act, should the need arise (Lee, 2018). Teachers must also be provided with detailed instructions, on what to do, where to stay, where there is closest exit and how to account for all students. The more tools and knowledge a teacher have, the stronger their ability will be to properly analyze the situation and make sound decisions to protect their students (Bal, 2021). Munyiri, Thinguri and Edabu (2020) found that in public secondary schools of Nairobi County, hiring of security personnel was an aspect of disaster risk management which is most influenced by school resource allocation. It is against this background that this study assessed the influence of governance practices in provision of a safe learning environment in public secondary schools in Makueni County, Kenya

Statement of the problem: Despite the existence of the Ministry of Education's Safety and Standards Manual (2008) and other policy interventions, many public secondary schools in Makueni County continue to report accidents, injuries, sanitation-related illnesses, and incidents of fire outbreaks. Reports indicate rising cases of unsafe school environments, with injuries, food poisoning, and sanitation-related diseases affecting students. This suggests a gap in implementation of safety measures, particularly in-service training, which is critical for

equipping staff and learners with skills to handle emergencies and promote a safe learning environment.

Purpose of the Study: The purpose of the study was to examine the influence of in-service training programs on the provision of safe learning environment in public secondary schools in Makueni County.

Objectives of the Study

The objective of the study was to determine the influence of in-service training programs on safe learning environment in public secondary schools in Makueni County.

Significance of the Study

The study may benefit different individual and authorities in different ways. For instance, school administrators, teaching and non-teaching staff and students may find the study useful in gaining an insight on the need to adhere to safety standards and guidelines in their respective schools in orders to enhance school safety. Policymakers at the Ministry of Health may find the study useful in developing policy framework on provision of emergency facilities such as firefighting equipment, alarm systems, first aid facilities and training of staff in disaster management.

Theoretical Framework

The study was guided by Abraham Maslow's Hierarchy of Needs Theory developed in 1943. This theory argues that while people aim to meet basic needs, they seek to meet successively higher needs in the form of a pyramid. Maslow's Hierarchy of Needs has often been represented in a hierarchical pyramid with five levels. The four levels (lower order needs) are considered physiological needs, while the top level of the pyramid is considered growth needs. According to Pfeifer (1998), to develop and learn, we need to make sure that we maintain safety be it in lives or in our jobs.. Safety constitutes one of the essential human needs, as postulated by Abraham Maslow in his hierarchy of needs theory on human motivation (Maslow & Lowry, 1979). In this work, the researcher addressed occupational, safety and health which builds on and improves Maslow's hierarchy of needs theory, thus prioritizing safety.

This theory is relevant to this study because it prioritizes safety as the second level after basic human needs. In regard to this study, for a school to achieve its education mission it is important to make students feel safe and secure. Students need to feel safe in the environment in which

they are learning without external threats because if they feel like they could potentially be harmed, this level of achievement would not be met. It is imperative that all educational administrators promote a safe learning environment in all institutions.

In-service Training Programmes and Safe Learning Environment

According to Okumbe (2015), in service training is the process of providing employees with specific knowledge and skills in order to enable them to perform specific tasks better. It is a short-term process which utilizes procedures by which non managerial Personnel learn technical knowledge. On the job training provides an opportunity for workers to learn in a relevant way. According to Itegi (2012), in service training increases the staff personnel's productivity by helping them to improve the quality and quantity of their work. It develops their productivity which enhances capabilities and their job satisfaction.

In-service training promotes efficiency and effectiveness in their job thus reducing the management problems associated with absenteeism, turnover and job restrictions among the teachers. Musyoka (2021), Health and Safety training programs are concerned with protecting staff and other people affected by what the organization produces and does. It aims at protecting staff against the hazards arising from their employment or their link with the organization. Occupational Health Training Programs deals with the prevention of ill health arising from working conditions. The safety training should outline the preventive and protective measures to the effect that appropriate precautions shall be taken to ensure that all workplaces are safe and without risk of injury to the safety and health of workers. Emphasis is also made in so far as information and training is concerned to the effect that workers shall be adequately and suitably informed of potential safety and health hazards to which they may be exposed at their work (Kyalo, 2016).

According to the Safety Standards Manual (2008), when safety training is provided for students, indicators for safety such as active participation of school programs, sense of ownership and low incidences of indiscipline are noted. Training such as fire drills, fire marshals, first aid and evacuation procedures in case of a fire break out go a long way in prevention of or lessening the effects of a disaster. Geissler (2015) explored the relationship between teacher training and their perception on school safety. The study employed a mixed methods research design. Data was collected using survey monkeys. Findings showed that more than 50% of the teachers had received training which helped them to feel more confident

in responding to risks and violent students. Additional training in safety drills helped them to manage risks better.

Sayedwali (2016) studied effectiveness of teachers In Service Trainings (INSET). Data was collected from 103 teachers using questionnaires. Findings revealed that the teachers yearned for further training and were ready to take part in INSET programs. Both female and male teachers had similar opinions regarding trainers' capabilities and they opined that INSET was very effective in equipping teachers with safety skills. Oguye (2015) investigated extent to which public secondary schools in Borabu, Kisii County had implemented recommended Safety Standards. The study target was 21 secondary schools and stratified sampling was used in sampling 11 schools. The sample was 11 principals, and 44 teachers. Data was collected using questionnaires, interview schedules, and observation checklists. The study showed that the status of school safety was in a bad state. The main challenge to compliance with safety standards was staff and students' training. Ng'ang'a (2012) study on factors influencing compliance with safety standards guidelines in secondary schools in Nyeri district established that there was no training of students on safety, all the principals were only trained on first aid administration. The study concluded that lack of training of students influenced compliance with safety standards manual.

Makokha, Enose, Simatwa and Were (2021) studied influence of safety standards training on the implementation of safety standards in boarding schools in Rangwe Sub-County, Kenya. The study adopted a descriptive and correlational research designs. The study target was 22 principals, four head teachers of boarding primary schools, 242 teachers in boarding Secondary, and 35 teachers in boarding primary. Data was collected using questionnaires, interview schedule, observation schedule and document analysis guide.

Findings showed that safety standard training influence implementation of safety standards by equipping head teachers, deputy teachers, support staff and students with desired skills and knowledge in the management of school safety standards. It also creates awareness on the importance of school safety standards guidelines and it also provides information on various hazards and their avoidance.

RESEARCH METHODOLOGY

The study adopted a mixed-methods design combining descriptive survey and phenomenological approaches to provide both quantitative and qualitative perspectives. The

target population comprised 9,769 respondents, including 400 principals, 3,769 teachers, and 5,600 members of Boards of Management (BoM) from 400 public secondary schools in Makueni County. Using Yamane's formula at a 95% confidence level and a 5% margin of error, a representative sample size of 379 respondents was determined. Stratified sampling was applied to create nine strata representing the sub-counties, after which purposive sampling was used to select principals and BoM members from schools with safety concerns over the last five years, while simple random sampling was employed to select teachers to avoid bias. Data collection tools included questionnaires for teachers, interviews with principals and BoM members, and a document checklist for secondary data.

The teacher questionnaire contained both closed and open-ended items organized around demographics, compliance with Ministry of Education safety standards, stakeholder involvement, and in-service training (INSET), with items measured on a five-point Likert scale. Reliability testing of the instrument yielded a Cronbach's alpha of 0.725, indicating acceptable internal consistency. Quantitative data were analyzed using descriptive statistics with SPSS version 29, while qualitative data from interviews were thematically analyzed. The integration and triangulation of both data strands enhanced validity, enabling a comprehensive understanding of governance practices and their influence on safe learning environments in public secondary schools in Makueni County.

FINDINGS

In-service Training Programmes and Provision of Safe Learning Environment in Public Secondary Schools

The study sought to examine the influence of in-service training programs on provision of safe learning environment in public secondary schools. Descriptive data were collected from teachers and results are presented in table 1 below.

Table 1: Teachers' Views on the Influence of In-service Training Programmes on Provision of Safe Learning Environment in Public Secondary Schools

Test Items	Ratings				
	SA	A	U	D	SD
	%	%	%	%	%
Students and staff are always taken through security drills to equip them handle security threats and emergencies	49.6	5.0	4.3	33.8	7.2
All students and staff in public secondary schools are exposed to the Ministry of Education safety manual	52.5	12.2	2.9	26.6	5.8
Public secondary schools regularly invite resource persons from different safety departments to talk to the students and staff about safety	44.6	15.8	4.3	28.8	6.5
Students and staff have not been trained on handling and use of safety gadgets such as fire extinguisher	59.7	7.9	5.8	21.6	5.0
Student safety sensitization programs are carried out in public secondary schools	50.9	7.5	3.1	28.1	10.4
Safety committees in public secondary schools are regularly trained on safety issues	39.5	8.3	5.7	38.6	7.9
All stakeholders are regularly trained on First Aid provision	32.0	6.6	4.8	50.0	6.6

Source: Field Data (2025)

Table 1 above shows that 113(49.6%) of the teachers strongly agreed with the view that students and staff are always taken through security drills to equip them handle security threats and emergencies whereas 15(5.0%) agreed, 10(4.3%) were undecided, 77(33.8%) disagreed whereas 16(7.2%) strongly disagreed. More than half, 120(52.5%), of the teachers strongly agreed with the view that all students and staff in public secondary schools are exposed to the

Ministry of Education safety manual whereas 28(12.2%) agreed, 7(2.9%) were undecided, 61(26.6%) disagreed whereas 13(5.8%) strongly disagreed.

The study revealed that 102(44.6%) of the teachers strongly agreed with the view that public secondary schools regularly invite resource persons from different safety departments to talk to the students and staff about safety while 36(15.8%) were in agreement, 10(4.3%) were undecided, 66(28.8%) disagreed whereas 15(6.5%) strongly disagreed. This affirms that safety of the learners is important.

During the interviews, the principals and members of school BoM also stated that there are sometimes security drills for staff and students on how to handle situations which threaten their lives in school. Principal, P9, stated;

In my secondary school, we often invite resource persons and experts to equip staff and students with security management and preparedness skills in line with the Ministry of Education Safety Manual.

BoM member, B 23 remarked;

As the Board, we prioritize inviting resource persons and security experts to train both staff and students on safety and preparedness in line with the Ministry of Education Safety Manual. This helps us our students and staff to stay alert and well-prepared to address emergencies

Similar views were expressed by the members of school BoM who stated that they are required to adhere to the Ministry of Education Standard Safety Manual which outlines how training of staff and students should be done to improve safety of learning environment. These findings corroborate the findings of a study carried out by Johnson et al (2020) which revealed that that consistent drills improve both confidence and efficacy in handling real-life emergencies.

The study also emphasized that both students and staff benefit equally, as drills create a shared understanding of roles and responsibilities during crises. Students and staff being exposed to safety manuals has also been a focal point of various studies. In the same token, a study carried out by Rizvi et al (2021) found that safety manual serves as a valuable reference tool, equipping schools with standardized safety protocols and fostering awareness about emergency procedures. Despite its technical nature, schools reported positive results when resource

persons simplified the content for practical application. Moreover, collaborations with external safety experts have gained traction as a popular strategy to enhance safety education.

This is also consistent with the findings of research undertaken by Smith et al (2022) which revealed that students and staff displayed heightened engagement and preparedness after attending safety workshops led by firefighters, medical emergency personnel, and law enforcement officers. These real-world interactions bring expertise that traditional teaching often lacks, spotlighting gaps in understanding and equipping the school community to bridge them effectively. These findings affirm the fact that security drills, the use of safety manuals, and engaging safety professionals collectively promote a robust culture of safety in public secondary schools. In other words, these measures aim to equip students and staff with the necessary skills to handle security threats and emergencies effectively.

More than half of the teachers, 136(59.7%), strongly agreed that students and staff have not been trained on using safety gadgets such as fire extinguishers, with only 61(26.6%) disagreeing. Similarly, 116(50.9%) strongly agreed that safety sensitization programs are conducted in schools, while 88(38.5%) disagreed. Principals and BoM members supported these views, noting inadequate training on safety gadgets despite the presence of sensitization programs.

These findings align with studies in Nairobi County: Malemba, Pepela, and Akali (2023) found only 10.16% of respondents reported regular fire safety training, while Ayonga (2016) revealed that equipment accessibility was poor and training lacking, leaving schools unprepared for fire emergencies.

Overall, the evidence highlights the urgent need for comprehensive training on safety equipment and First Aid, beyond the common fire drills, to better equip both staff and students. However, resource constraints mean that safety and First Aid training remains irregular. For instance, only 90(39.5%) strongly agreed that safety committees are regularly trained, while 73(32.0%) strongly agreed that all stakeholders are trained on First Aid, with about half disagreeing in both cases.

Principal, P10, noted;

In my secondary school, despite the desire to ensure that all members of staff and students are trained and equipped with skills on safety and First Aid, these initiatives have been hampered by the inadequacy of financial resources.

BoM member B15 said;

We truly desire to have all our staff and students trained on safety and First Aid, but inadequate funds makes it difficult to fully implement these initiatives. As a Board, we know the importance, but due to budgetary limits this continues to be a major hindrance.

Studies conducted in Limuru (Mburu, 2012) and Kericho (Chepngeno et al., 2024) show that while schools had safety committees and some training programs, many teachers and learners lacked adequate training and had not accessed the Safety Standards Manual. Similarly, Al Gharsan and Alarfaj (2019) found that only 19.6% of teachers in Saudi Arabia had sufficient first aid knowledge. These gaps in awareness and training significantly hinder effective implementation of safety protocols.

These findings are indicative of the fact that, though not frequently undertaken by schools, training of staff and students on safety issues is key to creation of safe learning environment. This indicates that safety committees in public secondary schools play a crucial role in ensuring the well-being of students and staff. However, a major concern is that these committees are rarely trained on safety issues, leaving schools vulnerable to preventable accidents and emergencies. Without proper training, committee members may lack the knowledge and skills needed to implement effective safety measures, respond to crises, and enforce regulations that promote a secure learning environment. This gap in training undermines the very purpose of these committees and puts lives at risk. Moreover, all stakeholders, including teachers, students, and non-teaching staff, are not regularly trained on First Aid provision. In an emergency, such as a student collapsing or an injury occurring in a laboratory or sports field, the lack of First Aid knowledge can delay critical care, worsening the situation. Regular First

Aid training ensures that individuals can respond swiftly to medical emergencies, potentially saving lives before professional help arrives. In other words, a well-trained school community is better prepared to handle emergencies, fostering a safer learning environment for everyone.

CONCLUSIONS

Drawing from the study findings, it is evident that provision of a safe learning environment poses significant challenges in many public secondary schools. Some of these schools have reported various incidents of accidents and injuries affecting both staff and students, alongside recurrent damage to physical facilities. This is partly attributed to the failure of such public secondary schools to adhere to safety standards and guidelines. In essence, insufficient enforcement and execution have led to perilous conditions. Such incidences of insecurity are also attributed to the infrequent involvement of stakeholders in significant discussions about how to foster safe learning environment.

This was also attributed to inadequate in-service training of staff and students on how to create safe learning environment. In other words, the findings showed that such training is infrequently conducted. Students rarely participate in security drills designed to prepare them for potential threats and emergencies, despite the expectation that they follow the safety guidelines set forth by the Ministry of Education.

RECOMMENDATIONS

Based on the findings, the study recommends that principals should ensure that their schools comply with safety standards and guidelines as stipulated in the Ministry of Education Manual. They should establish a structured safety audit and monitoring system to ensure continuous compliance with safety standards and guidelines. This includes conducting regular inspections, involving safety committees, and implementing corrective measures to address any identified risks. Principals should actively engage all stakeholders such as teachers, parents, students and the community, in collaborative decision-making to ensure a safe learning environment.

Establishing regular safety committees, open forums, and feedback channels allows stakeholders to voice concerns, suggest improvements, and take shared responsibility for school security. This inclusive approach fosters a sense of ownership and enhances proactive measures, such as implementing clear safety policies, anti-bullying programs, and emergency preparedness drills.

Principals in collaboration with the Ministry of Education should regularly conduct specialized training sessions on conflict resolution, mental health awareness, and emergency preparedness for both staff and students. Schools with ongoing professional development in these areas experience fewer incidents of violence, bullying and safety breaches. The T.S.C should organize training workshops on school safety for Principals to be familiar with school safety regulations and disaster mitigation measures. The M.O.E should conduct regular inspection of schools and give directions on the safety standards to be addressed by the school management. School B.O.M should allocate funding towards maintenance of school safety equipment as well as ensuring the school administration is sensitized on the need to implement safety regulations.

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