

**SCHOOL SAFETY AND ITS INFLUENCE ON TEACHING AND
LEARNING PROCESSES IN PUBLIC SECONDARY SCHOOLS IN
NAIROBI AND NYERI COUNTIES, KENYA**

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DECLARATION

This thesis is my original work and has not been presented in any other University for consideration. This thesis has been complemented by referenced sources duly acknowledged. Where text, data (including spoken words), or tables have been borrowed, including the internet, these are specifically accredited and references cited in accordance in line with anti-plagiarism regulations.

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DEDICATION

This work is dedicated to my loving parents, Richard Wanderi and the late Shelmith Muthoni, my husband Peter Nderitu, and my sons, Arnold and Alfred.

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ACRONYMS AND ABBREVIATIONS

AC RWC	African Charter on the Right and Welfare of the Children
ADA	Alcohol, Drug and Substance Abuse
ANOVA	Analysis of Variance
AVID	Advancement via Individual Determination
BEST	Building Educational Success Together
CPSC	Consumer Product Safety Commission
CRC	Convention on Rights of the Child
CWS	Church World Service
CQASOs	County Quality Assurance and Standard Officers
FTF	First Things First
GAO	The United States General Accounting Office
GPS	Global Positioning Systems
HISD	Houston Independent School District
IAQ	Indoor Air Quality
ICSS	International Conference on School Safety
MDGs	Millennium Development Goals
MOE	Ministry of Education
NCLB	No Child Left Behind Act
OBPP	Olweus Bullying Prevention Program
OHC	Opus Hamilton Consultants Ltd Organization
PBIS	Positive Behavioral Interventions and Supports
PDE	Provincial Director of Education
PTA	Parent Teacher Associations
PTO	Parent Teacher Organization

S.S.C	Safe School Contract
SSM	Safety Standard Manual
TLEA	Total Learning Environment Assessment
TSC	Teachers Service Commission
UNDCP	United Nations Control Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development
U.S.D.E	United States of America Department of Education
TLEA	Total Learning Environment Assessment
WASH	Water, Sanitation and Hygiene
WCEFA	World Conference on Education for All
WEF	World Education Forum

ABSTRACT

School safety is crucial for effective teaching and learning. It provides an opportunity for students to exploit and maximize their potential for learning, growth and development. An unsafe school environment; however, has a negative influence on student's performance. Governments worldwide have put in place policies and programmes to ensure school safety yet, cases of unsafe conditions in schools continue to disrupt teaching and learning. The purpose of this study, therefore, was to determine the status of school safety and its influence on teaching and learning processes in Public Secondary Schools in Nairobi and Nyeri counties, Kenya. This is meant to inform the re-mapping of safety standards and guidelines in Kenya for enhanced teaching and learning in public schools. The study was guided by the following research objectives: To assess the status of physical infrastructure safety in public secondary schools in Nairobi and Nyeri counties; To assess the status of social environment safety in public secondary schools in Nairobi and Nyeri counties; To establish the influence of physical infrastructure safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties, To establish the influence of social environment safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties and To seek suggestions from respondents on ways school safety can be enhanced to promote teaching and learning. This study used a descriptive survey design and targeted all (293) Public Secondary Schools in Nairobi and Nyeri Counties, their Principals and Deputy Principals, all (50155) form 2&3 students and (2) County Quality Assurance & Standards officers from the areas of the study. The Sample was obtained through stratified random sampling where these schools were categorized according to Boys Boarding, Girls boarding and Mixed schools according to the two counties. Students' Sample was obtained through proportionate simple random sampling from each stratum. The sample was three hundred and eighty-three (383) form 2 & 3 students, forty-four (44) Principals, and forty-four (44) Deputy Principals. Two (2) County Quality Assurance & Standards officers were also included in the sample purposively. Data collection instruments included; Students', Deputy Principals' and Principals' school safety questionnaire, interview guide for the County Quality Assurance and Standards Officers and an observation guide. Quantitative data was analyzed using descriptive statistics while qualitative data was analyzed using thematic analysis. Quantitative data was presented using frequency tables, percentages and figures while qualitative data was presented using narratives and voiced verbatim. The findings showed school physical infrastructure facilities were not safe as many schools had not adjusted the doors and windows of classrooms and other school facilities as per the requirements of the safety standards manual. The findings further showed that school safety greatly influenced teaching and learning processes in schools. Failure to follow guidelines when providing for school facilities and ignoring social environment issues, greatly influence negatively teaching and learning processes. The study recommends that the government, through the ministry of education enforce compliance to safety Manual for schools, re-structure the teacher training curriculum, include emerging issues in the school curriculum and increase allocation of resources to ensure schools adhere to the Ministry of Education Safety guidelines, particularly on physical infrastructure and school social environment, as these influence teaching and learning processes.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter provides the background to the study, statement of the problem, purpose of the study, objectives of the study and research questions that guided the study, significance of the study, limitations and delimitations of the study. The chapter also presents assumptions of the study, theoretical and conceptual frameworks as well as operational definition of key terms.

1.2 Background to the Study

Globally reviewed literature indicates that safety of learners is central to the provision of quality education (Glariana & Solar, 2015). A safe and secure school environment facilitates and fosters quality teaching and learning in educational institutions Maxwell et al, (2017).

Unsafe school environments have influences on child care, health, hygiene and sanitation (Munyasi, 2002). These influences underscore the urgent need for enhanced safety in learning institutions in order to provide safe school environment. Arum (2012) indicates that 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 outcome.

Any study or discussion of school safety should begin with a definition of how that term is used (May, 2014). According to United Nations Educational, Scientific and Cultural Organization (UNESCO, 2011), school safety refers to the process of

establishing and maintaining a school that is a physically, cognitively and emotionally safe space for students and staff to carry out learning activities. This can include procedures for maintaining a structurally sound building, conducting emergency drills and having an outlet for students and staff to report abuses or concerns. Similarly, according to Lussier and Fitzpatrick (2016) and May (2014), a safe school is the foundation of a good education. Studies have shown that when students feel safe, they learn better. Teachers can become more effective when they know students are under control and can concentrate on instructing the class (Ozmen, Durb & Akgulc, 2010)).

The importance of school safety in the provision of education is well documented in various studies (Reyes et al, 2012, Glariana & Solar, 2015; Maxwell et al., 2017). The importance of provision of safety in schools has further been underscored by various international conventions notably the United Nations Conference (Hyogo; Japan, in 2005) and the United Nations Conference in Geneva, Switzerland, 2009). The United Nations conference in Geneva, Switzerland (2009) in particular called on all governments to undertake assessments of existing education and health facilities by 2011 and to develop and implement national action plans for safer schools and hospitals in all disaster prone countries by 2015. In the next sub section, the study conceptualizes the term “school safety” and “teaching and learning processes” as used across the globe.

1.2.1 Conceptualization of “School Safety” and “Teaching and Learning Processes”

The concern over school safety was first raised during a United Nations Conference held in Hyogo, Japan, referred to as the Hyogo Framework for Action 2005 - 2015

(HFA); “Building the Resilience of Nations and Communities to Disaster”. This was followed by a series of other conferences that emphasized the importance of school safety. The United Nations Conference in Geneva, Switzerland (2009) insisted on National Assessment of School Infrastructure while The Global Platform for Disaster Reduction (2013) requested that a Global Safe Schools and Safe health infrastructures campaign be initiated in Disaster prone areas with a voluntary funding and commitments by 2015. The conference noted that provision of safety in school was deficient in terms of existing educational infrastructure facilities, disaster reduction and preparedness as well as lack of a holistic approach to school safety (UNESCO/UNICEF, 2012).

In response to the challenge, the United Nations developed “a tool”, Thematic Platform on knowledge and Education to support governments in developing a holistic approach to school safety. An example of such a tool is the global baseline study on school safety that provided guidelines and recommendations to governments for school safety implementation, including successful safety assessments. The United Nations also developed a worldwide initiative for safe schools that focuses on motivating and supporting governments to develop national strategies and implement school safety (UN, 2013). The initiative builds on the comprehensive school safety framework and defines a safe school as a combination of safe learning facilities (Disaster resilience infrastructure), School disaster management and Disaster Risk Reduction and Resilience education (UN 2013). In order for regional and national members to realize school safety, the United Nations Educational Scientific and Cultural Organization (UNICEF) issued a School Safety Manual as a tool for teachers in Africa. The Manual was produced as part of a

“Teacher Training and Development for Peace -building in the Horn of Africa and surrounding countries” project. It aimed to introduce teachers to the knowledge and skills needed for the establishment, maintenance and sustainment of basic school safety (UNESCO, 2017). The Manual states that it is the responsibility of schools to provide a safe environment for their students. This responsibility is affirmed in the United Nations (UN) Sustainable Development Goal Four on Education. Target 4a states:

Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environment for all (UNESCO, 2015).

According to Benbenishty and Astor (2005), every country to a certain extent is concerned with the issue of safety in learning institutions. This is as a result of recurrent accidents and disasters in schools which include fire, floods, gun attacks, collapsing buildings and which have disrupted teaching and learning activities in learning institutions. In view of the above, organizations in The United States of America, Europe, Australia, Asia and Africa took safe school initiative to fulfill the Hyogo Framework Action 2005 – 2015.

In the United States of America, a series of school shootings prompted the US government to provide a framework for schools to use to reduce cases of insecurity. Brooks (2017), for example, tackles the history of violence in schools and analyzes direct and indirect aspects contributing to this increasingly common trend, while Musu-Gillette, Zhang, Wang, Zhang and Oudekerk (2017) analyzes the indicators of school crime and safety in the United States of America. In the 2007-08 school years, for instance, 85% of public schools reported at least one violent crime at

school contributing to 1.5 million student victims of nonfatal crimes, including 26 violent crimes per 1000 students; compared to 20 violent crimes per 1000 students away from school. Twenty five percent of schools reported student bullying occurred on a daily or weekly basis; and while the rate of crime for students away from school declined between 1992 and 2007, no measurable difference was found in schools between 2004 and 2007 (UNISDR, 2010; Alba & Gable, 2012).

In the United States of America, A Guide for preventing and responding to school violence, “International Association of Chiefs Police 2rd edition” (2009), explains mitigation measures to ensure schools are safe. 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 (Marquet, 2013).

In an earlier study, Schneider (2002), had stated that The United States of America 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. Schneider further indicates that the subject of school safety has received considerable attention from the public, and that, educators were held accountable for students’ achievement (School Facilities Maintenance Task Force, 2003). The No Child Left Behind Act of 2001(NCLB), a Legislative Act, requires educators in public schools to be accountable for improving and closing the achievement gaps in students’ academic performance. McGowen (2007) states that the evaluation of school facilities to ascertain their safety, along with reform movements, allowed educators and planners to align

academic initiatives with tangible factors of the school safety. Further, McGowen (2007) notes that on the one hand, student achievement, attendance and completion rate measures were not statistically significant in relation to school facility conditions as measured by the Total Learning Environment Assessment (TLEA) at the 0.05 level. On the other hand, discipline or behaviour was found to be significantly related to the TLEA. Thus, school safety could be used to predict discipline factors for schools which are very crucial to teaching and learning process (McGowen (2007)).

Similar views have been echoed by Bullock (2007) who states that since the passage of The No Child Left behind Act of 2001(NCLB) in the USA, there has been a call Nationwide for school systems to be accountable for safety issues in schools .The United States General Accounting Office (GAO), 1996) and Schneider (2002) note that the average age of schools in United States of America was close to fifty years old and they had documented widespread physical deficiencies that had negative influences on teaching and learning process.

According to Building Educational Success Together (BEST, 2005), it was the responsibility of educators in every state to ensure that every child had access to quality education in school facilities that provided an educational setting that was suited for teaching and learning process. BEST (2005) further states that implementing policies that resulted in high quality, high performing, well-designed and maintained school facilities had a direct and indirect influence on the teaching process, and that safe enhancement strategies contributed to the success of every student in every school in the United State of America.

BEST (2005), indicates that safe schools create an environment that increases academic, social and emotional success - an environment of strong school connectedness, and that students who feel connected to school have both positive academic and behavioral outcomes. Increased student connectedness promotes classroom engagement and school attendance which increases students' academic achievement and competency to overcome challenges. Connected students are focused, achieve higher grades, and invest in relationships at school.

Studies show that Programmes to Build Interpersonal Connectedness have successfully been implemented in Illinois, Hawaii and Colorado (Horner, 2009, Elias & Arnold, 2006; Legter, Balfanz & McPartland, 2002). Such programme as First Things First (FTF) is an evidence-based school-wide programme that focuses on improved academic performance through small learning communities (Best Practices for effective schools, pp. 2 - 3). Developed by the Institute for Research and Reform in Education, the primary goal of FTF is to build close, respectful and productive relationships between students attending schools in economically disadvantaged communities and adults working in those schools. The programme features low student to adult ratios in core classes, increased student-adult interaction, and high academic and conduct standards. Each student is paired with a staff advocate who serves as counselor and mentor, and who meets periodically with the student's parent to review academic and behaviour performance. Results in a pilot school showed a 25% increase in students qualifying for graduation, a 57% decrease in the number of suspensions, and improved daily attendance and parent involvement (Horner, 2009).

Positive Behavioral Interventions and Supports (PBIS) is a process for creating safer and more proper schools (Horner, 2009, pp.4). The process focuses on improving school's ability to teach and support positive behaviour for all students which is crucial for educational outcomes. It is a team-based process for systematic problem solving, planning, and evaluation. An assessment of 33 elementary schools (K–5) in Illinois and Hawaii showed that schools implementing PBIS were perceived as safer environments and reported improved educational performance (Horner, 2009).

In Australia, the National Crime Prevention, in partnership with other Commonwealth and state partners have developed an approach to school safety across all states and is investing in long term projects aimed at buttressing the capacity of schools, their staff and communities. According to Shaw (2002), a review of school based prevention policies have been undertaken. Innovative and restorative policies that deal with safety in schools have also been piloted in Queensland and the Australian Capital Territory. These approaches have improved school safety in Australia and positively impacted on educational outcome.

In Spain, Díaz-Vicario and Sallán (2017) explore the concept of safety as it is interpreted by schools and analyse the extent to which schools are committed to the goal of creating safe and healthy school environments. Díaz-Vicario and Sallán also identify organizational and management practices that promote the safety of school staff and users. 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 and organizational actions and measures were

implemented to ensure physical, emotional and social safety which consequently influenced teaching and learning processes in schools.

In Asia, the Association of Southeast Asian Nations (ASEAN) Safe School Initiative (ASSI) was initiated in 2012 under the purview of the ASEAN Committee on Disaster Management. It partners with civil society organizations to promote a comprehensive approach to school safety so that children become more resilient to disasters and to have safe and secure learning environment in South - East Asia. The ASSI initiative is informed by the Global Framework for Comprehensive School Safety. It comprises three pillars - safe learning facilities, school disaster management and, risk reduction and resilience education.

In promoting safe school environment in South Africa, current approaches on enhancing school safety have been put in place. These approaches include: exemplary programmes such as “TiisaThuto”, “Crisp” and “Cass” (Mgadla, 2006). “TiisaThuto” involves developing partnership among schools, parents, local business and community organizations in implementing model programmes that address the security needs of individual schools. The “Crisp” project organizes school safety teams to link parents, schools, local organizations and police. “Cass” is a comprehensive model involving local community partners, national government development guidelines and support materials for school managers, educators, and safety committees. This has strengthened school-community partnerships and child participation and consequently addressed the aspects of teaching- learning environment and educational quality.

Uganda has implemented the Safe School Contract (S.S.C) as one of the identified interventions which strengthen the role of teachers, pupils, parents and their involvement in children's education. The Ugandan Ministry of Education and Sports together with United States Agency for International Development (USAID) introduced more than 200 schools to S.S.C by the year 2008 so as to enhance safety in school. Through the experience in the 200 supported schools, S.S.C offers a mechanism for promoting safety in schools through strengthening school-community relationships and student participation (Lulua, 2008). These interventions have improved school safety and directly enhanced teaching and learning processes in Ugandan schools.

Since the attainment of independence, the Government of Kenya has committed itself to improving standards of education at all levels. This commitment has been driven by the need to provide education as fundamental human right as well as a response to the Hyogo Framework for Action 2005 -2015 to establish and maintain safer schools. It is for this reason that the government has from time to time appointed various educational commissions, committees and task forces to address various challenges facing education sector including safety of schools (MOE, 2008). The Kenya Government's commitment to the promotion of access, equity, participation, retention, completion and quality of education is bound to be affected if safety and security concerns are not addressed fully. Therefore, in 2003, the Ministry of Education entered into a partnership programme, "School Safe Zones" with Church World Service (CWS) to promote enhanced safety for learners in schools. The programme was successfully piloted in selected schools in Kajiado, Murang'a and Nairobi districts. It was in view of the success of the pilot phase of the

programme that the Ministry of Education with the support of CWS engaged a team of consultants to compile a *Safety and Standards Manual* for use in all Kenyan schools. The *Safety and Standards Manual* comprises 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.

Knowledge of school safety laws and regulations provides administrators with the authority to know what is allowed, what is forbidden, as well as what actions are considered to be an obligation to the school. Studies done in Kenya on safety in schools indicate that disasters related to unsafe school environments continue to be experienced in educational institutions (Maoulidi, 2008; Jagero, 2011). However, according to Medlen (2012), the safety issues confronting schools are different depending on their nature and location, sophistication, frequency and complexity. This study, therefore, focused on the status of school safety and its influence on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties, Kenya. This is because the field of school safety is replete with paucity in empirically testable and contextually sound frameworks with regards to public secondary schools in Kenya.

1.3 Statement of the Problem

Kenyan educational institutions have experienced several ghastly incidents, which other than leading to damage of properties, injuries and loss of lives through cases of fire and other health risk situations, have led to disruption of teaching and learning processes. From 1999 to 2008, a series of safety incidents were experienced in schools. These incidents included: St Kizito incidence in (1991), the Hawiga Girls' rape incident (1993), the Bombolulu fire tragedy (1998), Nyeri High school fire (1999), Kyanguli fire (2001) and Upper Hill fire (2008). The incidents prompted the Ministry of Education (MOE) in partnership with the Church World Service (CWS) to issue the Safety and Standards Manual for Schools (SSM) in 2008.

Despite the issuing and existence of the SSM, safety issues in schools are on an upward trend. This trend of students' unrest is worrying to both parents and school community. In Nyeri county for example, Reports from the County Director of Education (CDE, 2016) indicates that students' unrest, a form of safety concern in schools, escalated from 16 in 2014 to 18 in 2015 and then to 43 in 2016. In Nairobi County, Wanzala (2017) reports that a fire gutted down a dormitory in Moi Girls High School in September and killed Nine students. Some of the findings from these incidents indicate that safety of physical facilities such as removal of mesh wires from the windows, adjustment of doors to open towards outside and addition of emergency exits to allow for easy escape in case of an emergency, could have been ignored. Due to these safety concerns, there was a need to establish and assess the status of school safety and its influence on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties, Kenya.

1.4 Purpose of the Study

The purpose of this study was to establish the status of school safety and its influence on teaching and learning processes in public secondary schools in Nairobi and Nyeri Counties, Kenya, in reference to Safety and Standards Manual issued in 2008 by the Ministry of Education.

1.5 Research Objectives

The research objectives were:

1. To assess the status of physical infrastructure safety in Public Secondary schools in Nairobi and Nyeri Counties.
2. To assess the status of social environment safety in Public Secondary schools in Nairobi and Nyeri Counties.
3. To establish the influence of physical infrastructure safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties.
4. To establish the influence of social environment safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties.
5. To seek suggestions from respondents on ways school safety can be enhanced to promote teaching and learning in Public Secondary Schools in Nairobi and Nyeri counties.

1.6 Research Questions

1. What is the safety status of school physical infrastructure in public secondary schools in Nairobi and Nyeri Counties, Kenya?
2. What is the safety status of school social environment in public secondary schools in Nairobi and Nyeri Counties?

3. What influence does school physical infrastructure safety has on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties?
4. What influence does school social environment safety has on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties?
5. How can schools enhance safety to promote teaching and learning processes in Public Secondary Schools in Nairobi and Nyeri counties?

1.7 Significance of the Study

School safety is an integral and indispensable component of teaching and learning processes. Indeed, no meaningful teaching and learning can take place in an environment that is unsafe and insecure to both learners and staff. It is, therefore, imperative that educational stakeholders foster safe and secure school environment to facilitate increased learner's enrolment, retention and completion and hence attainment of quality education. As such, this study hoped to be of significance to the following stakeholders in education.

1. To the policy makers the study hoped to shed light on the safety issues influencing teaching and learning processes in schools in Kenya. Further, based on the recommendations of the study, the study hoped that policy makers were likely to be drawn into initiating policy review process aimed at filling in the existing gaps.
2. Based on the results of the study the researcher hoped that school administrators and managers would be informed about how to deal with various safety issues in order to have a safer school and therefore better performance. Moreover, the results of the study may shed light on how to reduce instances of school fires,

riots, strikes, suspensions, expulsions and other disruptive actions that caused suffering to both the students and school's general teaching and learning practices.

3. The researcher hoped that the students would be sensitized on the importance of ensuring a safe social environment that may probably lead to their safety. When students are not worried about being bullied, bitten, or being injured, they are able to focus on learning.
4. Additionally, it was hoped that the teachers would benefit from this study since proper implementation of the recommendation is likely to create an environment conducive to their teaching rather than to have their attention divided due to lack of school safety.
5. From the results of the study, the researcher hoped the study would add to the existing knowledge on the benefits of 'School-community collaborative initiative' where shareholders prudently use resources, and strategies to enhance safe and caring in schools as well as give support to all youth to enable success at school and beyond (Adelman & Taylor, 2006).

1.8 Limitations of the Study

1. A number of respondents, especially the Principals complained that there were too many researchers who wanted their attention, and considering that data was collected during school term calendar, the researcher was seen as interfering with school programs. To address the issue, the researcher made prior arrangements with the schools and only visited the time that was deemed appropriate by the school administrators. The researcher then listened to the school administrators and patiently convinced them that the study was very

important and that they would benefit from the findings. The approach however consumed a lot of time and money, but it finally worked.

2. There were some respondents who failed to respond to all items in the questionnaire. Such incomplete responses were excluded during data analysis and consequently in the final report which affected the sample size for that particular response.
3. Researcher's subjectivity during research process could not be completely ignored; the researcher however allowed respondents adequate time to express their views in order to balance subjectivity with objectivity.
4. The researcher used stratified random sampling and some of the schools were in the interior rural places that were difficult to access especially due to transport related concerns and bad weather. This caused some delays and the researcher could not submit the work at the stipulated time. The researcher however collected data in these places when the weather was conducive.
5. Finally, since ensuring school safety was a core responsibility of the school administrators, some withheld crucial information for fear of being reprimanded. However, the researcher addressed the issue by upholding ethical consideration and assuring all respondents that confidentiality would be observed.

1.9 Delimitations of the Study

1. Although safety in schools is a concern in all learning institutions, the study was restricted to public secondary schools in selected counties due to challenges related to time and finances. However, the recommendations that

were suggested by the study were expected to benefit all public secondary schools in the counties.

2. It is evident that all school stakeholders have vital information regarding safety in schools; however, respondents to the study were Education officers, Principals, Deputy Principals and Students.
3. Out of various research designs and methodologies, the study used a descriptive survey design to enable the researcher collect data on the status of school safety and its influence on teaching and learning processes from a wide range of respondents in a shorter period of time.

1.10 Assumptions of the study

This study was based on the following assumptions:

- i) All schools have the safety standards policy in form of Safety Manual that they were using as a guide to ensure school safety.
- ii) The level of implementation of the safety guidelines could be different in schools.
- iii) There were programmes put in place to ensure safety in public secondary schools in Nairobi and Nyeri counties
- iv) It was assumed that data collection instruments would provide data that would enable the researcher to answer the research questions. A pilot study was conducted to make data collection instruments reliable.
- v) The respondents would answer the questions truthfully. In order to achieve the desired response, the researcher adopted the principle of confidentiality.

1.11 Theoretical Framework

This study adopted the systems theory proposed in the 1940's by Ludwig von Bertalanffy (1968) in his General Systems Theory. The Systems theory is an interdisciplinary theory about every system in nature, in society and in many scientific domains as well as a framework with which we can investigate phenomena from a holistic approach (Capra, 1997). The elements in a system are rationally connected towards a shared purpose (Golinelli, 2009). A system can also be defined as an assemblage of objects united by some form of regular interaction or interdependence. According to Tien and Berg (2003):

A system can be natural (e.g., lake) or built (e.g., government), physical (e.g., space shuttle) or conceptual (e.g., plan), closed (e.g., chemicals in a stationary, closed bottle) or open (e.g., tree), static (e.g., bridge) or dynamic (e.g., human). In regard to its elements, a system can be detailed in terms of its components, composed of people, processes and products; its attributes, composed of the input, process and output characteristics of each component; and its relationships, composed of interactions between components and characteristics" (pp.23-24).

The theory has four key elements which guide it. The first element is the object which consists of the parts or variables within the system. The second element is that a system is made up of attributes which may include the qualities or properties of the system and its objects. Third, a system has internal relationships among its objects and last but not least, a system has been conceptualized as to exist in a given environment. A system, then, is a set of things that affect one another within an environment and form a larger pattern that is different from any of the parts.

The school can be likened to a system in that it is made up of elements such as the managers (BOM) the administrators (Principal, Deputy principals, Captains etc)

teaching staff, Non teaching staff and students. In order for these elements to function properly, they have attributes that must interact .These are the qualities of the stake holders of the schools. Students are seen as raw materials that have to undergo processes in order to become useful in society. The school has to provide inputs that go through the necessary processes so that the desired outcome is realized. In the present study, in order for a school to be safe, all stake holders in education such as educational managers, school management, teaching and non teaching staff, students and parents among others have a responsibility of working together to ensure safety in their schools. Their cooperation is vital especially when it comes to creating an environment safe and conducive for proper teaching and learning process.

1.12 Conceptual Framework

Proper teaching and learning processes depend on school safety status as indicated in Safety and Standards Manual for Schools in Kenya (MOE, 2008) that no meaningful teaching and learning could take place in unsafe and insecure school environment. A safe school entails safety in school physical infrastructure such as classrooms, offices, toilets, dormitories, libraries, laboratories, kitchen, dining halls toilets, playground among other physical structures (MOE, 2008). Omolo and Simatwa (2009) indicate that when such structures are appropriate, clean, adequate and safe, the resultant influence is students' improved achievement. Proper teaching and learning also involves a safe School Social Environment. School Social Environment Safety takes place when key stakeholders such as learners, staff, school administration, parents, and other members of school communities participate in eradicating the social evils such as alcohol, drugs and substance abuse, child abuse

and mistreatment of children with special needs. For a school to ensure that the social environment is safe, safety programs such as bullying prevention, Guidance and counselling, pastoral care and suspension and expulsion prevention should be put in place (MOE, 2008). Similarly, safety practices such as Fire drills, Lock down, evacuation procedures and positive culture should prevail, and be embraced by all stakeholders.

Jagero (2011), notes that all stakeholders must be well aware of possible threats to school safety and provide a social environment that is supportive of proper teaching learning processes.

Schools that observe physical and social environment safety may enjoy improved academic performance, increased students' attentiveness in class, participation in co-curricular activities, fewer accidents and related deaths in schools compounds, fewer cases of absenteeism, well maintained school facilities, increased student -teacher interaction, increased retention and completion rate among students, elimination or reduction of student access to ADA, more student focussing on learning, and increased access and quality of learning for children with special needs among other positive benefits of quality education.

Such outcomes are better promoted if the relationships among stakeholders are cordial, reinforcing, cooperative, and respectful and focused on promoting an environment conducive for teaching and learning processes in schools, as conceptualized in Figure 1.1

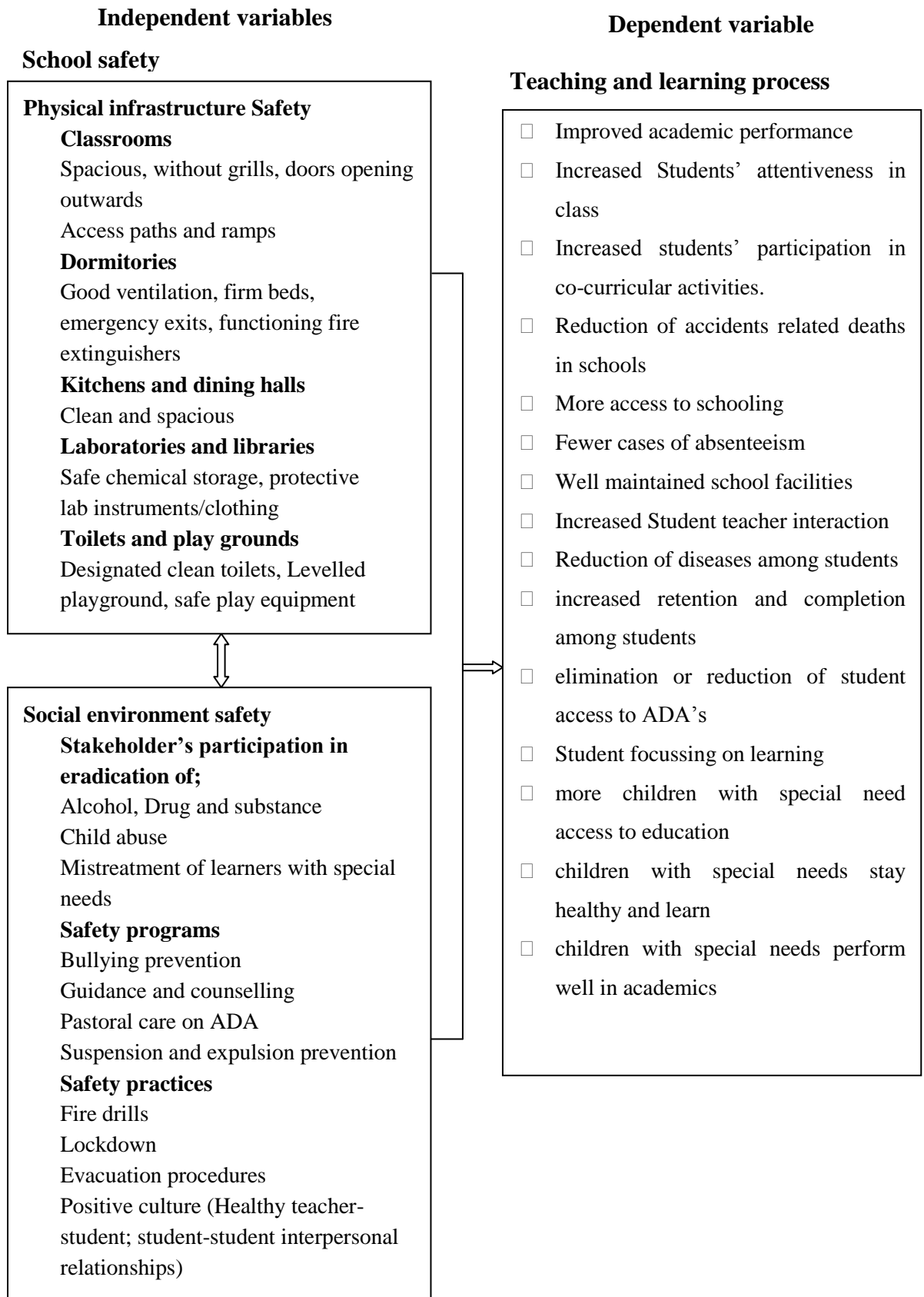


Figure 1.1: Conceptual Framework showing the relationship between school safety and teaching and learning process

1.13 Operational Definition of Key Terms

Child abuse: As used in the current study, the term refers to any inhuman act subjected to Children. It may be in any form - physical abuse such as corporal punishment and child labour, or emotional-exclusion from daily lesson attendance and different forms of bullying.

Children with Special Needs: As used in the study refers to learners who may have physical disabilities such as hearing, mild sight, walking and other psycho- motor challenges. It also refers to the lesser gifted in intellectual learning.

Influence: The term as used in this context refers to any influence that school safety, or lack of it, has on conditions that bring about teaching and learning in an educational institution.

Physical Infrastructure safety: In this study the term refers to school buildings, fences, compound, and all other physical facilities within the school. The conditions and measures put in place to ensure safety of school members, such as maintenance, repairs as well as disaster risk reduction mechanisms (Either adequate or inadequate according to the Safety Standards Manual), to determine the safety state of the school.

Proper Teaching and Learning outcome: In this context the term refers to the expected outcome after the learners and teachers interact. Such outcomes include students' participation in class, corroborative learning, and improved performance among others.

Rural: As used in the study refers to schools in the agricultural region. Safety of learners from these places may be affected by the socio- economic factors of the regions.

Safety against Alcohol, Drug and substance Abuse: The term as used in the current study refers to traditional liquor as well as processed beers, wine and spirits. It is the action taken to curb abuse of alcohol, drugs and substance by learners who have a notion that taking drugs may assist them to improve in academic performance. Teenagers, especially those who abuse these substances, find it difficult to cope with the learning process. Therefore, for proper teaching and learning to take place, schools need to ensure that learners are safe from any form of substance abuse. Teachers, peers, parents and community members have a responsibility to reduce if not totally eliminate abuse of alcohol, drug and substance use within and outside the schools.

Safety against Child Abuse: According to MOE (2008), incidents of Child Abuse are in the increase in the country. Children subjected to any form of abuse find it difficult to cope with the learning process. In the current study the term refers to schools' community attempt to shield learners from physical abuse such as corporal punishment, exclusion from daily lesson attendance, and all forms of bullying. Consequently, for proper teaching and learning to take place, schools need to ensure that learners are safe from any form of physical abuse and neglect by teachers, peers, parents and community members.

Safety of Children with Special Needs: In the current study, the term refers to attempts by schools to create a social environment that makes learners with special needs comfortable. Attempts such as, provision of access paths and ramps to school

facilities, acceptance of these learners and provision of guidance and counselling programs. The Ministry of Education (2008) explains that there is a need to enable children with special needs access education at all levels without discrimination. It is the policy of Government to integrate or mainstream children with mild disabilities into the regular school programme to enhance their participation in formal education.

School Culture and Climate: In this study, it refers to school lifestyle or traditional way of doing things. It may include but is not limited to the school routine, the philosophy, traditions, mission and vision of the school.

School Safety: As used in the study refers to conditions in the school that ensure that the members are physically, psychologically, emotionally, socially and spiritually healthy. School safety is broadly concerned but not limited to status of physical facilities, negative or risky student behaviors, digital/Internet safety, gang activity in schools among other anti-social behaviours in the school.

School Safety practices: As used in this study refers to school practices such as fire drills, lock down, evacuation procedures and positive teacher- student and student-student interpersonal relationships.

School Safety Programmes: According to the study, the term refers to the school programs such as the Bullying prevention, Guidance and counselling, evacuation procedures, pastoral care and other intervention, mitigation of, and recovery programs, from the various natural, physical, social and technological threats to school safety. They contribute to safe school environments that are conducive to teaching and learning process.

School Social Environment safety: This term broadly refers to all community interactions associated with the school. However as used in this study, the term is limited to how members of the school handle cases against abuse of alcohol, drug and substance use, child abuse and safety of children with special needs. It also considers the cordial relationship that exists among the members of the school community.

Status: As used in this study refers to the existing conditions of safety in the selected schools. It is the way the physical facilities, school grounds, and the entire school social environment are, as far as safety is concerned, as indicated in the Safety and Standards Manual for schools provided by the Ministry of Education in Kenya.

Teaching and Learning Processes: This term as used in the study refers to the ongoing activities such as students' participation and corroborative learning in the classroom, library, school laboratory, and all other area activities in the school that enable teachers to teach and learners to learn. It requires participation of school administrators, teachers, learners and parents for it to run well and to improve the academic performance.

Urban: In the current study refers to the schools in the cosmopolitan. The lifestyle of the learners in urban schools and the surrounding areas is likely to influence the safety status of the entire school community.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The chapter provides a review of literature related to status of school safety and its influence on teaching and learning process in public secondary schools in Nairobi and Nyeri Counties. It is divided into five thematic sections. First, status of school physical infrastructure safety , Second, Status of school social environment safety, third, influence of school physical infrastructure safety on teaching and learning processes, fourth, influence of school social environment safety on teaching and learning processes. The last theme is on ways of enhancing school safety to promote teaching and learning processes in public secondary schools. Summary of the literature review and demonstration of research gaps is also provided in this chapter.

2.2 Status of School Physical Infrastructure Safety

The school's physical infrastructure is of paramount importance in as far as safety in schools is concerned. They include structures such as classrooms, dormitories, libraries, laboratories, dining halls, kitchen, toilets and playground among others. According to the Safety standards Manual (2008), such structures should be appropriate, adequate and properly located devoid of any risks to users or to those around them. They should comply with the provisions of the Education Act (Cap 211), Public health Act (Cap 242) and Ministry of public works building regulations / Standards.

Reviewed studies indicate that school structures should be safe to ensure proper teaching and learning processes. Donmez and Guven (2002) for example, found out

that the most serious safety problems in schools in Malatya, Turkey came from lack of control in the playground and school corridors. Donmez and Guven also note that parents value adequate and clean school facilities. These findings highlight the significance of the safety of physical facilities in an institution. The current study assessed the status of physical facilities such as playgrounds and their influence on teaching and learning in the sampled schools. In addition, to fill the geographical gap, the current study looks at the school safety and its influence on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties in Kenya.

Mgadla (2006) carried out an investigation on the basic safety and security status of 23 Primary schools and 12 Public Secondary schools in Sedibeng District, South Africa. The study employed phenomenological approach, purposive sampling was used and the main respondents were head teachers. The research instruments used in the study were observation and interview schedules while data was analyzed using descriptive statistics and qualitative procedures. The study showed that schools within township areas were prone to unsafe conditions and threats of violence due to, *inter alia*, poor resources and infrastructure, their location, especially in and around informal settlement, the type of their building and environmental design. Mgadla's study informs the current study on the basic safety and security status of primary and secondary schools. However, whereas Mgadla's study employed a phenomenological approach, the current study employed the descriptive survey research design. In addition, purposive sampling was used in Mgadla's study since the main respondents were head teachers. In the present study, stratified random sampling was used for principals, deputy principals, students while purposive

sampling was used for CQASOs for Nairobi and Nyeri counties. Further, to fill the geographical gap, the current study was carried out in Kenya.

Disaster preparedness is very crucial for ensuring that schools are safe. Kipng'eno and Kyalo (2009) noted that when head teachers, teachers and students were asked whether their schools had performed fire drills in the past one year, it was found out that neither head teachers nor teachers had participated in any fire drill a year before the time of the study. Ten respondents said that their school had performed a fire drill but they had not been involved. Only one respondent from the category of schools that had not performed any fire drills indicated to have participated. Kipng'eno and Kyalo's study informs the present study on the importance of fire drills as a way of ensuring safety in a school setting. However, unlike Kipng'eno and Kyalo's study, the present study goes further to analyse the nexus between school safety and its influence on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties in Kenya.

Maritim, King'oo and Barmao (2015) assess the state of physical infrastructural safeness in secondary schools in Kenya. The study was anchored on the Chaos Theory which offers lessons for managing periods of extreme instability in a system. The study employed the descriptive survey design. Stratified and purposive sampling techniques were used to determine the sample size. The respondents of the study included head teachers, teachers, students and security officers. The research instruments used were questionnaire, interview schedule and observation checklist. Data obtained was analyzed both quantitatively and qualitatively. The study notes that most schools were not adequately prepared for emergencies both in terms of planning and equipment. Even though Maritim, King'oo and Barmao study

examines physical infrastructural safeness in secondary schools in Kenya, it informs the present study on the methodology employed in the study. That is, the research design, research instruments and the respondents. However, unlike Maritim, King'oo and Barmao's study, the current study employs the system theory. Further, in order to fill the geographical gap, the current study was carried out in selected public secondary schools in Nairobi and Nyeri Counties.

In order for schools to ensure students are safe, the laid down policy and procedures must be followed. Nyabuti, Role and Balyage (2015) look at the safety policy implementation framework for secondary schools in Kenya. The study targeted 18 public National secondary schools in Kenya which had sat for KCSE since 2010. Stratified random sampling was used to sample 6 schools to take part in the study. The six national secondary schools had 6 head teachers, 120 class teachers, 300 form three students, 6 watch-men, and 4 Quality Assurance and Standards Officers (QASOs), making a total of 436 respondents. The significant differences in terms of implementation, level of awareness, attitudes of teachers and students, and strategies in enhancing school safety, were tested using One-way Analysis of Variance. Nyabuti, Role and Balyage note that there was minimal safety awareness, with variations in attitude among teachers and students. Head-teachers, Quality Assurance and Standards Officers (QASOs), teachers, students and security personnel were found to be playing a significant role in the implementation of safety policies in schools. The current study intended to find out how the sampled schools had implemented the safety standard guidelines. Nyabuti, Role and Balyage's study informs the present study on the safety policy implementation framework for secondary schools in Kenya. However, while Nyabuti, Role and Balyage's study

employs ANOVA in the analysis of data, the present study is based on descriptive statistics. In addition, the present study did not sample watchmen as respondents and did not limit its scope to national schools. These are some of the gaps addressed in the present study.

2.3 Status of School Social Environmental Safety

Reviewed studies indicate a safe school social environment as one where there is a clean facility and caring teachers. Respectful relationship between peers is also an important facet of a safe school social environment (DeVoe, 2006). According to Perkins (2006), a report by the National School Board Association noted that a positive school environment was a crucial factor that differentiates between schools with high and low rates of delinquency. In addition, Perkins notes that behaviour disturbance, attendance and academic attainment were also critical in differentiating schools.

According to the Safety Standards Manual (2008), the World Health Organization defines a safe school as one which is healthy. Health here is taken to mean a state of complete physical, mental and social well-being of human beings and not merely the absence of disease (MOE, 2008). The school health programme should therefore contribute to the maintenance and improvement of the health of learners and school personnel. It should be a shared responsibility of the school community, sponsors, parents and the entire surrounding community.

Before enrolling their children to a particular school, parents usually have to consider factors such as quality of education, the location of the school as well as the school culture. In urban centers, parents do not have the luxury of choosing schools

based on such considerations. Instead, they have to scramble for the little space available in the few schools that serve these communities, regardless of the social environment. Out of a desperate need, many children from the slum communities are enrolled in schools where infrastructure is wanting and where poor sanitary and hygiene conditions pose a major health threat (Kipng'eno & Kyalo, 2009).

Drug abuse is a major concern to communities and governments all over the world. Press Reports indicate that the use of illegal drugs has spread at a high rate and has penetrated most parts of the world. No nation has been spared from the drug menace and the world has shown concern over the problem (Kenya Times, July 4, 2003). Drug barons have been identified in some countries as financing some politicians. Latin American countries, for example, have been identified as having large plantations of opium, cocaine and marijuana (Kenya Times, November 3, 2003).

A report from the United Nations Drugs Control Programme (UNDCP) shows that drug menace has assumed terrifying proportions all over the world as minimal headway is being achieved in its eradication. This has been attributed to lack of commitment from governments and the sophisticated nature of drug business presently (UNICEF, 2016). Daily Newspapers such as the Standard (Kenya) continue to report on how drug misuse is causing havoc in schools. A report for example on “Tragic Case of drug abuse in schools and at home” states that National Authority for Campaign Against Alcohol and Drug Abuse found out that students between ages 13-16 years were the most hard hit by cases of drug abuse and they were the ones who were involved in indiscipline cases such as child molestation and bullying in schools (Daily Standard, March, 5, 2017).

Although the interest and expectation of the peer groups have an important bearing on whether or not a person will try dependence producing drug, homes where drugs are abused are likely to be the source of information for drug users about the availability of drugs and their allegeable effects (Pudo,1998 as cited by Gatua, 2015). Young people learn from what they see by imitating what parents and other people in the community do. Young people have often redirected their money into the purchasing of drugs. In order to try and solve drug problem, school administration should put in place administrative factors that address students' affairs (Gatua, 2015). The practice of good school community relations is crucial for an environment that is conducive, if any teaching and learning is to take place (MOE, 2008).The present study sought to find out how schools in Nairobi and Nyeri counties tackled alcohol and drug menace in their schools.

In order for schools to maintain a safe social environment, safety programs should be put in place. In a study involving primary school teachers from Washington in the United States of America, Miller (2003) notes that 30% of teachers agreed that violence prevention programmes and safety policies in schools were inadequate in the prevention of threats to school safety. In an earlier study, Katherine and Dana (1999) note that 22% of students were not willing to go to school due to incidences or threats of violence. Peach and Reddick (1991) also note that 93% of teachers believed that police officers were needed to maintain security in schools and that legal protection was required against people who hurt others in primary schools of Tennessee. In another study, Foster (2002) notes that social activities made the perceptions of students positive. Bass (2003) carried out a study on the relationship between school safety and school culture in Arizona and found that unwanted

incidents were prevalent in schools where there existed an unappealing school culture. McMullen (1999) emphasizes the importance of a democratic policy and the investment in people towards making schools safer. This is because factors which threaten school safety stem generally from underestimating learners' safety, family safety, school safety and environmental safety. These studies inform the current study on the importance of safe social environment in ensuring school safety. However, the above studies were undertaken in United States of America, while the present study was undertaken in public secondary schools in Nairobi and Nyeri counties in Kenya.

Interpersonal relationship among the school community is crucial for a social environment to be safe. In Kenya, internal threats to school social environment safety mainly stems from bullying of new comers from the old students. According to the Editorial, Daily Nation of Wednesday Twenty Six January Twenty Eleven, guidelines had been launched to curb bullying in schools. Teachers are required to create a safe learning environment and act against bullies. Parents have also been urged to improve their relationship with their children at home. The guidelines which were drawn up by the Ministry of Education (2008) urges heads of primary schools to involve stakeholders and local community in the school activities so that learning becomes effective. The Manual also notes that the children's success is not necessarily passing a written examination. "It means accepting diversity in the different ways that children learn" . The present study sought suggestions from the respondents on safety ways that could enhance teaching and learning processes in public secondary schools in Nairobi and Nyeri counties.

2.4 Influence of School Physical Infrastructure Safety on Teaching and Learning Processes

This section discusses the influence of school physical infrastructure safety on teaching and learning processes. According to MOE (2008), school physical infrastructure include structures such as classrooms, dormitories, kitchen, dining halls, laboratories, libraries, toilets, and other related structures such as playgrounds. These facilities can either be permanent or temporary structures. To ensure safety, such buildings should be appropriate, adequate and properly located devoid of any risk to users or those around them. They should also comply with the provisions of the Basic education Act (2013) Public Health Act (Cap 242) and Ministry of Public Works Building Regulations and Standards.

2.4.1 Influence of Classroom Safety on teaching and learning processes

Safety of classrooms is important in a school since learners spend most of their time in these buildings. Reviewed literature on the impact of the availability of classroom furniture (desks, tables, chairs) on test scores in developing countries, however, has not been conclusive. While Njora (2008) found significantly negative results of impact of classroom furniture on the reading and Mathematics scores of grades 5 learners in urban and rural areas of Vietnam, Khan and Kiefer (2007), earlier results on the impact of classroom furniture on student learning were statistically insignificant. Concerning the impact of the status of classroom furniture on student's time in school, Glewwe and Krause (2016) found no significant impact.

The above studies inform the current study on the role of classroom facilities in the teaching and learning processes.

Similarly, reviewed literature on influence of the availability of blackboards, flipcharts or chalk in the classroom on learners' test scores at both the secondary and elementary urban and rural areas of Madagascar were found to be statistically significant (Glick et al., 2011). In another study conducted in Indonesia to find out whether availability of blackboards, flipcharts or chalk in the classroom affected dictation test scores at the primary level in urban and rural areas of Indonesia, however, found no significant influence (Suryadarma, Suryahadi, Sumarto & Rogers, 2006). The above studies inform the current study on the importance of classroom facilities in the teaching and learning processes. The current study however, addresses the methodological gap by adopting the descriptive research design. Further, the study filled the geographical gap by undertaking classroom facility safety concerns in public secondary schools in Nairobi and Nyeri counties in Kenya.

A study was conducted by Oluremi (2012) on the creation of a friendly school learning environment for children in Nigeria. The areas of the study included the provision of infrastructural facilities, classroom environment and teacher pupil interaction. Descriptive research design was used and a questionnaire was used to elicit data from a sample comprising 250 teachers from selected secondary schools. Results noted that 25% of the selected schools were not child friendly as they lacked requisite infrastructural facilities such as chairs, desks and tables and toilet facilities among others. Most classrooms were also not friendly to learners with disabilities. The current study filled the data collection methodological gap by using a combination of questionnaires, interview schedules and observation checklists.

Further, to fill the geographical gap the current study was carried out in public secondary schools in Nairobi and Nyeri counties in Kenya.

Okebukola (2000) provided a statistical analysis of the unsafe situations in the Nigerian classrooms as follows: 87% of the pupils were in overcrowded classrooms, 12% sat on the floor, 3% of the schools had no chalkboards, 38% of the classrooms had no ceiling, and 77% of the pupils lacked textbooks and 36% of the pupils had no writing materials. This kind of classroom environment impacted negatively on the classroom activities of both the teacher and the learner. Okebukola's study found out that when classroom environment is conducive, learners are able to concentrate on learning. The above study informs the current study on the impact of classroom safety in the teaching and learning processes. However, the current study attempts to fill the geographical gap by undertaking school safety in public secondary schools in Nairobi and Nyeri counties in Kenya.

Fresh air in the classroom ensures that learners stay healthy as well as keeps them alert and attentive during the day. Jung, Park, Jeon, Song, Lee (2015) analyze the indoor air quality (IAQ) concentrations by measuring and characterizing IAQ at 440 school rooms from May, 2009 to November, 2012 in Korea. The study notes that in some school rooms the PM_{10} concentrations exceeded the IAQ guidelines ($100 \mu g/m^3$) of the Ministry of Education. Jung et al note CO_2 concentrations at high schools were 1.18 and 1.06 times higher than that of the elementary and middle schools, respectively. Moreover, TBC concentrations at elementary school rooms were 1.23 and 1.33 times higher than that of the middle schools and high schools, respectively. TBC and HCHO concentrations did not exceed the IAQ guidelines. The classroom / non-classroom ratio of PM_{10} was 1.06, while that of CO_2 was 1.04,

HCHO was 0.62, and TBC was 1.16. Jung et al study informs the present study on the indoor air quality needed in classrooms. However, unlike Jung et al's study which is done in Korea, the present study is carried out in selected secondary schools in Nairobi and Nyeri Counties.

2.4.2 Influence of Dormitory Safety on teaching and learning processes

Dormitories are the single most used physical facility in boarding schools where learners spend the longest continuous period of time. It is, therefore, imperative to keep these facilities properly ventilated and clean (MOE, 2008). Reviewed studies on the influences of dormitory safety on teaching and learning are however somehow mixed.

From one study on influences of living conditions on student's academic performance in secondary schools of Goma sub - district in Uganda, Nabaseruka (2010), found that good accommodation offers students excellent opportunities for learning and social interaction with fellow students from varying social backgrounds. When students interact, they learn new ideas which help them to develop all the three domains of psychomotor, affective and cognitive. The student's capacity to learn is widened and the fear to learn fades, leaving them ready to learn and even consult teachers or those with knowledge about the subject (Nabaseruka, 2010). In another study however, Lloyd, Tawila, Wesley, Clark and Mensch (2003) found that the impact of dormitory safety on time in school was statistically insignificant. Though these studies assessed the influences of living conditions on student's academic performance in secondary schools and the impact of dormitory safety on time in school respectively, they did not address the influence of school

dormitory safety on teaching and learning processes in Nairobi and Nyeri counties in Kenya.

2.4.3 Influence of Dining Hall and Kitchen Safety on Teaching and Learning Processes

Kitchen and dining halls are crucial facilities in any school since they boost health and hygiene safety of learners. Calabrese (2001) postulates that eating from unsafe places could lead to food poisoning which occurs as a result of eating contaminated food with certain types of bacteria, parasites, viruses or toxins. Carter (2002) asserts that food programmes in schools are commonly used to attract learners to school so that they can concentrate and learn. This is in line with the feelings of Ministry of Education Science and Technology (2005) in Sessional Paper No. 1 of 2005 that school feeding programme is an important tool of enhancing access, retention, completion and transition rates in all schools in Kenya. Similarly, according to Reid (2000), since cooking and catering can produce significant amounts of fumes and vapor as well as large amounts of heat, there is a need to have enough room for staff to work comfortably and a safe and proper storage of food. Apart from the issue of safety, when dining hall and kitchen facilities are clean, spacious, and accommodative, students' time in school is increased as well.

Jagero (2011) evaluated the environmental factors within a school affecting performance of boarding secondary students in Kisumu district - Nyanza Province. The sample size was as follows: Five Principals; 46 form four teachers; and 201 form four students. Data were analyzed using descriptive statistics and inferential statistics such as linear multiple regression and factor analysis. Jagero indicated that students were eating from open and unsafe places since most dining halls lacked

adequate, appropriate and well maintained furniture such as chairs and tables, this could lead to food poisoning which occurs as a result of eating contaminated food with certain types of bacteria, parasites, viruses or toxins. Utensils and other related facilities were worn out and unkempt. Jagero further revealed that dining halls were small and squeezed; furniture did not match the school enrolment in that most students did not have tables and chairs to use. Students were observed having their meals while standing. The above studies inform the present study on the importance of observing cleanliness in the Dining Halls and kitchen and also the environmental factors within a school affecting performance of boarding secondary students. However, while Jagero's study employs descriptive statistics and inferential statistics such as linear multiple regression and factor analysis, the present study is based on descriptive statistics. Further, to fill the geographical gap, the present study focuses on public secondary schools in Nairobi and Nyeri counties in Kenya.

2.4.4 Influence of Laboratory and Library Safety on teaching and learning processes

Science laboratories are important facilities for proper teaching and learning physical science subjects. Reviewed studies on the impact of safe science laboratories on teaching and learning processes, indicate that, science teaching labs, where students perform experiments using chemicals to test the theoretical concept they learn in classes are crucial in learning science subjects (Richards-Babb et al, 2010 and Kadel, 2017). Further laboratory exercises help to increase students' interest in learning sciences (Uy, 2011) though hazardous chemicals, glassware, and equipment in the labs may pose dangerous environment to students and instructors in the absence of proper safety measures (Richards-Babb et al, 2010). Other studies

indicate confusing results in relation to education out comes. A study by Sprietsma (2012) on the impact of safe science laboratories on students' test scores in urban schools had significantly negative results while results for rural schools had significantly positive results. These studies inform the current study of the importance of observing laboratory rules and instructions in order to ensure safety in the science laboratory. However the current study aimed at filling the gap on the influence of laboratory safety on teaching and learning processes in Nairobi and Nyeri counties.

Studies on the influences of library safety on teaching and learning processes indicate that students benefit from these facilities when safety is provided. Reid (2000) states that library is a crucial resource in a school to enhance reading and comprehension skills. Similarly, Finkkle (2000) postulates that libraries should be acknowledged as an important ingredient of any school system and should be among top priorities.

Studies on the impact of school library safety on test score provide evidence that a school library increases students' learning since the results were significantly positive (Fehrler, 2009; Glewwe & Jacoby, 1994; Sprietsma 2012; Kristin, Henrich Richard & Stoddart 2016)). However, in another study, Borkum, He and Linden (2013), found that the results of the impact of school library safety on test scores were negative and statistically insignificant. These confusing findings prompted the researcher to carry out a research on the safety status of school physical infrastructures such as laboratories and libraries and its influences on teaching and learning in public secondary schools in Nairobi and Nyeri counties.

2.4.5 Influence of School toilets and playground Safety on teaching and learning processes

Availability of adequate, clean, well maintained and safe toilets in a school enhances access to education and improves quality of learning (MOE, 2008).

Reviewed studies indicate that improving school water, sanitation and hygiene (WASH) conditions reduces pupil absence and illness as well as improves school attendance for girls (Caruso, et al, 2014; Trinies, Garn, Chang & Freeman, 2016). Caruso, et al, (2014) carried out a study to assess the impact of a school-based latrine cleaning and hand washing program on pupil absence in Nyanza Province, Kenya. The study used a cluster-randomized trial to determine if a low-cost, policy-relevant, environmental-level latrine cleaning intervention could, a) improve latrine cleanliness, b) increase latrine use, and c) reduce absenteeism. The study assessed absence via periodical roll-call among 17,564 pupils in 60 schools that previously received WASH Improvements as part of the WASH project. Latrine conditions and use were also assessed using structured observation. Latrine cleanliness increased significantly during the post-intervention period among schools receiving the latrine-cleaning package compared to controls. Hand washing with soap increased as well in intervention schools relative to controls. The study recommended that improving latrine conditions is important for the dignity and well being of pupils, and investments and strategies are necessary to ensure school sanitation environments are clean and pupil-friendly. The above study informs the current study on the importance of cleanliness of toilets and provision of a clean school sanitation environment in general in order to retain students in schools. However, while Caruso et al study used cluster-randomized trial design, the current study used descriptive

survey design to assess whether availability of clean separate toilets for boys and girls in public secondary schools in Nairobi and Nyeri counties influenced teaching and learning processes.

School playground safety for learners is a human as well as constitutional rights' issue aimed at strengthening learners' participation in outdoor learning activities. Safe grounds are an important component of child-friendly schools that are grounded on the Convention on the Rights of the Child (CRC), (1989) and other frameworks such as the World Conference on Education for All (WCEFA, 1990), the World Education Forum (WEF, 2000), the Millennium Development Goals (MDGs, 2000), International Conference on School Safety (ICSS, 2007) and for African states, and the African Charter on the Right and Welfare of the Children (ACRWC, 1999). These policy frameworks obligate the world governments to ensure learners play in caring or child friendly outdoor environments that are learner centered, inclusive, gender equitable and proper in enhancing excellence in acquisition of physical (or motor) and psychosocial skills. The CRC (1989) and the ACRWC (1999), for example, point out that children have a right to play in environments that offer physical and emotional support in order to participate actively in and benefit from their learning and developmental activities. The WCEFA (1990) and the WEF (2000) recommend school environments that serve as protected sanctuaries and which focus on learners' physical, mental and socio - emotional needs for safety, security and intellectual stimulation for lifelong learning. Several studies on safety of school playground (Fisher, 2000; Peterson, 2002; Earthman, 2004; Omolo & Simatwa, 2010; & Macharia 2012) have indicated that there is a direct relationship between safe school grounds and teachers' ability to

properly and efficiently accomplish daily activities, the formation of social and professional relationships and the sharing of information and knowledge.

According to the US Consumer Product Safety Commission's Handbook (CPSC, 2010), adequate and proper surfacing of the school playground strongly influence how learner participate and benefit from activities carried out in the playground. CPSC (2010) further recommends installation and maintenance of shock absorbing or fall influence attenuating surface materials under and around the fall or exit zone of play equipment.

Peterson (2002) postulates that falls from around play equipment are the most common playground hazards accounting for 80% of the injuries that are serious as well as health and life threatening, while 68% are due to falls to the surface and over 10% are from falls to the equipment.

Peterson further states that fall cause injuries that can immobilize children thus reducing activity time and at times cause death. Safe conditions in the school grounds are essential for learners because they feel protected from life threatening injuries and when safety is integrated into children's learning activities, it stimulates more diverse and creative activities, children's confidence and self-esteem and hence more interest to engage more in teaching learning process (Wortham & Frost, 1990).

According to Berry (2002), the purpose of any school ground is to ensure safety of learners in the outdoor environment. Therefore, it is necessary for school management to engage in routine maintenance and inspection which involves

checking play areas and equipment for damage and repairs, modification and replacement or removal of any item that can cause injuries or harm such as; broken equipment, glasses, stones, potholes, sharp or protruding objects or edges, splitting wood, rusted or corroded metals and tall grass among others. Berry further contends that a well-maintained playground sends a message to the learners, teachers, parents and school administration that participation in the outdoor activities is important and that the result of safe school grounds are active learners, fewer injuries and increased capacity for handling more quality sensory input leading to cognitive and motor development.

Despite these studies indicating the importance of ensuring safety in the playground, Omolo & Simatwa, (2010) assert that school grounds continue to experience stigmatic safety problems and constraints related to unsafe school playgrounds. In another study Macharia (2012) notes that school ground safety influences learners' participation in outdoor activities in Naivasha District. Macharia, further notes that although adequate supervision of learners while using schools' playground was meant to ensure control of children in their activities and to reduce emergencies in many schools, learners were inadequately supervised outside classrooms. This led to unsafe acts such as wandering aimlessly, fighting and venturing into unsafe areas and using equipment inappropriately. The study recommended more studies in the area of school safety. The current study therefore, sought to find out whether safety of school playground had an influence on teaching and learning processes in the sampled schools.

Due to the inconsistencies in terms of findings, method of data collection and the sample size used concerning the influence of school physical infrastructure safety on teaching and learning, it was found prudent to carry a research to find out the influence of school physical infrastructure safety on teaching and learning processes in Nairobi and Nyeri counties.

2.5 Influence of School Social Environment Safety on Teaching and Learning Processes

School social environment safety refers to how the school community interacts and handles the social environment. In the present study, school social environment referred to how members of the school community ensured that there was safety from alcohol, drug and substance abuse, child abuse and that there was safety of children with special needs. Social environment encompasses the role played by the school culture, healthy positive relationships and engaged teaching and learning (Hoy, 2012; Macneil, Prater & Busc, 2009). It involves healthy environment activities where learners and school personnel are treated to a healthy programme that contributes to the maintenance and improvement of their health as well as ensures that school teaching and learning programmes take place as scheduled.

In order to ensure that School social environment is safe, collaborative effort of all key stakeholders such as learners, staff, school administration, parents, and members of communities, Ministry of Education officials and school sponsors among others is needed (MOE, 2008). In the same vein, Jagero (2011) states that all stakeholders must be well aware of possible threats to school safety and provide a social cultural environment that is supportive of proper teaching learning processes for full development of the students. Such an outcome is better promoted if the relationships

between various stakeholders are cordial, reinforcing, cooperative, and respectful and focused on promoting an environment conducive for teaching and learning.

The Safety and Standards Manual (2008) indicates that there should be quality interpersonal relationships in schools that are cordial, cooperative, and respectful that focuses on promoting an environment conducive for teaching and learning. When this is maintained, cases of students' indiscipline such as bullying, sexual harassment, abuse of drugs and learners being unruly may be minimized. The researcher in the current study sought to find out how the sampled school members handled social environmental issues such as alcohol, drug and substance abuse, child abuse and safety of children with special needs, in order to promote teaching and learning processes in the sampled schools.

2.5.1 Alcohol, Drug and Substance safety and its influence on Teaching and Learning Processes

The World Health Organization (WHO) defines a drug as any substance other than those required for maintenance of normal health, which when taken into the living organism, may modify one or more of its functions (Ghodse, 2003). A report by United Nations Drug Control Programme (UNDCP) shows that 60% of students abuse drugs (Njeri & Ngesu, 2014). According to United Nations office on drugs and crime UNODC (2011), alcohol and drug abuse poses a great threat to the social economic fabric of nations worldwide (Cheloti & Gathumbi, 2016).

In Kenya, for example, the abuse of drugs has rapidly increased to unprecedented level despite various measures taken to stop it (Masita, 2004; Ngesu, Ndiku & Masese, 2008; Njeri & Ngesu, 2014; Cheloti & Gathumbi 2016)). Alcohol and drug

abuse is not only a dangerous behaviour but a risk factor to a host of other risky behaviours such as sexual violence, high risk sexual activities, suicide, and disruptive behaviours in school such as students' unrest, burning of schools, massive school dropout and dismal academic performance (Cheloti & Gathumbi, 2016).

Njeri and Ngesu (2014), for example, employ a survey research design to find out what makes students abuse drugs in Dagoretti Division, Nairobi and the influences that arise out of this practice. Njeri and Ngesu found that majority of students, abuse drugs to feel high and as a result of peer pressure. They also note that poor performance is the greatest influence of drug and substance abuse among students. The study recommended heavy punishment of drug abusers as well as guidance and counseling sessions to minimize the vice and make secondary schools drug free. Njeri & Ngesu's study informs the current study on the factors that lead to abuse of drugs in secondary schools in Dagoretti Division in Nairobi. The current study however aimed at finding out measures that schools were taking to reduce drug abuse and probably enhance teaching and learning processes in Nairobi and Nyeri counties.

In another study carried out to assess the effectiveness of school community in curbing drug and substance abuse among secondary school students in Nairobi (Cheloti & Gathumbi, 2016) found out that students obtained drugs from school community and that lack of cooperation from parents and guardians frustrated the schools intervention strategies in curbing drug abuse. Cheloti & Gathumbi's study informs the current study of the importance of community support in reducing cases of drug abuse, as well as in the design and the research instrument used. However, the current study went further to include observation check list and an interview

guide to collect data on the influence of ADA on teaching and learning processes on the sampled schools.

Research on whether alcohol use could conceivably affect a student's quality of learning and academic performance has not been conclusive. While Several studies have reported that alcohol use during adolescence affects educational attainment by decreasing the number of years of schooling and the likelihood of completing school (Chatterji, 2006), other researchers using alternative estimation techniques suggest that the influences of teen drinking on years of education and schooling completion are very small and / or non-significant (Dee & Evans, 2003; Koch & Ribar, 2003).

However, there is a general consensus among current neurological research that underage drinking can harm learning by causing alterations in the structure and function of the developing brain with serious ramifications beyond adolescence (Brown, Tapert, Granholm & Delic, 2000). Negative influences of alcohol use can also emerge in areas such as planning and executive functioning, memory, spatial operations, and attention (Brown et al., 2000; Giancola & Mezzich, 2000). Misuse of alcohol could also affect the performance by reducing the number of hours for studying, completing assignments, and attending school. The current study sought to fill this gap by seeking suggestions from the respondents on ways schools addressed issues of alcohol, drug and substance abuse in order to enhance teaching and learning processes in the sampled schools.

2.5.2 Child Abuse safety and its influence on teaching and learning processes

Child abuse is a social, economic, human rights and public health issue, with significant negative health and social impacts. The Ministry of education MOE (2008) states that Child abuse within the school setting and violence experienced by school-age children impacts negatively on the learners.

Child abuse can take several forms such as physical, psychological and emotional abuse. Physical abuse may take the form of beatings and engaging a child in heavy work that affects his physical growth and development (UNICEF, 2016). Psychological abuse is characterized by a person subjecting, or exposing another person to behaviour that may result in trauma, anxiety, depression or post - traumatic stress disorder (Dutton et al., 2000). Emotional abuse on the other hand may take the form of an adult repeatedly belittling a child's ability to perform normal tasks. This may lead to chronic lack of self-esteem and low self confidence, anger, distress, withdrawal behaviour and learning delays (MOE, 2008).

The influences of child abuse can be devastating on the child's social and educational life and there is compelling evidence that abused children may never totally recover from the trauma (Leach, Machakanja & Mandoga, 2000). The influences of child abuse generally manifest in one or more of the following: loss of attachment; fewer interpersonal relationships; reduced self-esteem; a highly-sexualized individual; depression or anxiety and avoidance behaviors (Sango & Chiinze, 2015). In addition, the influences of child abuse on teaching and learning process takes the form of some children being excluded from lessons for several days. Reasons given for exclusion from lessons are failing to complete homework, not bringing writing materials, lack of participation in class, mischief, getting to

school late and non-payment of fees and levies (Sango & Chiinze, 2015). When a child is excluded from class, the child's right to education is violated and such a child may carry this disadvantage into adulthood. It may also take the form of inadequate supervision of children's work emanating from teachers attending to private business while in class or leaving the classroom before time, to chat with fellow teachers in the staffroom leading to reduced learning opportunities for the learners. Such behaviours witnessed from teachers inculcate a culture of laziness in the learners as they may tend to accept retiring on the job as an acceptable job practice. The current study sought to establish the existence of the various forms of child abuse and their influence on teaching and learning processes in the sampled schools.

2.5.3 Special Needs/ Disabilities safety and its influence on teaching and learning processes

The policy of the Kenyan Government is to integrate learners with mild disabilities into the regular school programme to enhance their participation in formal education. This enables learners with special needs access education without discrimination at all levels of learning (MOE, 2008). However, Leonard and Cheshire (2013) state that some parents were still hiding children with disabilities due to stigmatization, or because they are considered too costly to maintain and are of no economic value to the home as compared to the normal children. According to the various policies, special needs include, among others, the provision of access paths to facilities within the school compound; support of learners with special needs by making sure that the teaching and learning environment is responsive to their needs; and sensitizing parents / guardians and communities so that learners with disabilities are taken to school (MOE, 2008).

Broderick (2018) explores whether the capability approach can offer novel insights into the vision of educational equality contained in the United Nations Convention on the Rights of Persons with Disabilities and how that vision can be implemented at the national level. Since the adoption of the Convention, there has been much theorizing about inclusive education; however, there has been little focus on the meaning of equality in the context of the right to education for persons with disabilities. The capability approach is often viewed as a tool that can be used to overcome the limitations of traditional equality assessments in the educational sphere, which only measure resources and outcomes. Broderick's study informs the present study that the right to education is indispensable in unlocking substantive human rights and in ensuring full and equal participation of persons with disabilities in mainstream society. However, contextually, in order to fill the geographical gap, the present study investigated how the educational needs of special learners are provided in public secondary schools in Nairobi and Nyeri counties, Kenya. In addition, the present study looks at the link between school safety needs of special learners and teaching and learning processes.

Kurth, Morningstar, Hicks and Templin (2018) describe the SWIFT technical assistance model which is aimed at transforming schools to develop inclusive and effective instruction for all students. Multilevel multinomial modeling was used to predict rates of inclusion over time for a subset of students with disabilities in schools participating in the SWIFT technical assistance. Kurth et al note that schools were more inclusive in their services, with many students predicted to be served in less restrictive general education placements and others no longer requiring special education services. Kurth et al's study informs the present study that inclusive

education is a right and preferred placement for all learners with disabilities receiving special education services. However, Kurth et al's study does not indicate whether inclusive education influences teaching and learning processes. Further, to fill the geographical gap, the present study focuses on Nairobi and Nyeri Counties, Kenya.

Pingle and Gar (2012) analyze the development of a positive attitude in student-teachers towards inclusive education. Pingle and Gar use a quasi-experimental design with the pretest and posttest non-equivalent group. The study sample consisted of 77 student-teachers in the experimental group and 53 in the control group from two colleges offering Diploma in Teacher Education Course. Data was analyzed using descriptive statistics and inferential statistics. The study notes that student-teachers from experimental group showed moderate positive disposition towards feasibility issues, collaboration issues and their perception towards students with special needs was positive. However, no change in attitude towards basic philosophical issues of inclusive education was seen. Similarly, no change in the attitude towards inclusive education was seen in control group. This indicated that treatment given to the experimental group was effective. Pingle and Gar's study informs the present study on the importance of inclusive education programme and its effectiveness. However, Pingle and Gar's study does not look at whether inclusive safe social learning environment influences the teaching and learning processes. Further, to fill the geographical gap, the present study focuses on public secondary schools in Nairobi and Nyeri Counties, Kenya.

Research confirms that it is important for teachers to note that children who are emotionally and physically healthy do well in school. This is because they miss

fewer classes, are less likely to engage in risky or antisocial behaviour, concentrate more, and achieve higher test scores. This is possible where teachers are trained thoroughly on how to handle children with special needs. According to Leithwood and Jantzi (2008), schools of the 21st century require well trained personnel who would embrace a multidimensional approach to enhance school safety so as to bring about school improvement and properness. Unfortunately, this is often overlooked (Brown, Beardslee Prothrow-Stith, 2008; Daniels & Garner, 2013). In line with the above, Gatua (2015) recommended that schools should have a learning environment that is safe and caring that caters for the requirements of children with special needs in order to enhance proper teaching and learning processes. The current study sought to investigate how children with special needs were handled in public secondary schools in Nairobi and Nyeri Counties, Kenya.

2.6 Suggestions on Ways to enhance school safety for Teaching and Learning Processes

School community members are in a unique position to identify ways that can enhance school safety. When, for example, anti-social behaviours such as violence, bullying and truancy occur among students, they are identified early, which alerts administrators on the need to implement prevention measures that can protect the entire community. Creating safe supportive school programmes for example, is essential to ensuring school safety success. There are multiple elements to establishing programmes in which young people can feel safe, connected, valued, and responsible for their behavior and learning. In recent years, school administrators have worked hard to ensure safety at school and it is encouraging to know that their efforts like student's counseling programs are making a big

difference. The United States Department of Education and Justice (2004) report on school crime and safety showed decreased violence cases among secondary school students where counseling programmes were implemented (DeVoe, Peter, Kaufman, Miller, Noonan, Snyder & Baum, 2004).

Reviewed studies have shown that there are various programmes which may be put in place to facilitate school safety (Marquet, 2013; Cheloti & Gathumbi 2016; and Diaz-Vicario & Sallán, 2017). Some of these programmes are designed to promote discipline while others are to develop a school culture which would enhance teaching and learning practices. Implementing programmes to promote a positive school culture has influenced the overall school safety as well as teaching and learning practices (Maithya, 2009, Suraya & Yunus, 2013). In a study undertaken in Malaysia, Suraya and Yunus (2013), indicate that a positive school culture is an important aspect that should be emphasized to ensure proper teaching and learning processes. The study found out that passion and the desire of learners to continue focusing on their education could be enhanced if schools are in an orderly, safe, harmonious and conducive environment and had teachers who were concerned about the academic progress of the learners. Suraya and Yunus further argue that a healthy school culture can assist the learner's development in learning, produce a cooperative school community and create a harmonious environment. A healthy school culture can also create a positive image to the community and enhance students' scores and self - efficacy.

A key issue disrupting the safety of students in public schools has been that of bullying. A study carried out by Ndeti et al (2007) found that 63.2% and 81.8% of learners in public secondary schools in Nairobi, Kenya reported various types of

bullying with significant variations based on age, sex, class and year of study, in day or boarding school, and the place where bullied. Bullying was found to distort the overall comfort of students within the school and hence affecting their learning processes as well.

A Similar study by Ngesu, Gunga, Wachira, Muriithi and K'Odhiambo (2013) investigated the causes, manifestations and consequences of bullying in secondary schools in Kenya. The findings show that both intra-school and extra-school factors are related to the incidences of bullying in schools. Intra-school factors such as challenges experienced in an attempt to enforce rules and regulations, peer influence and academic achiever syndrome are factors that play significantly. Influences of bullying in secondary schools are manifested in absenteeism, violence, high school drop-out rates, low self-esteem and poor academic Performance. The study recommends strengthening of religious institutions to instill useful values and enlisting the support of the community. The study recommends that teacher-parent partnership is crucial for eradicating bullying in schools.

Due to increased rate of bullying in schools, many governments in collaboration with other stakeholders in the educational sector decided to come up with an anti-bullying programme. The Olweus Bullying Prevention Programme (OBPP) has been implemented in other parts of Europe and the United States (Werle, 2006). This programme entails the performance of a needs' assessment, the identification of problems, the planning of interventions, the performance of the intervention, and the evaluation of the intervention and the modification of the plan that is based on evaluation results (Padgett, Notar & Charles, 2013).

The Olweus Bullying Prevention Programme (OBPP) is a school - wide model that involves members of a school community, for example, teachers, administrators, staff, students, bus drivers, cafeteria personnel, PTA or PTO, parents and custodians. The OBPP requires interventions that involve the school, classroom and the individual (Black, Washington, Trent, Harner & Pollack, 2010). The activities entail the implementation of the programme, surveying the groups that are involved, enforcing and establishing rules, increased communication, positive reinforcements and curriculum development. However, Walton (2005) observes that programmes that reduce bullying in schools are founded in a misunderstanding of bullying. Walton (2005) further states that such policies and programmes were utilitarian and misguided.

Other programmes such as suspension and expulsion have been used in secondary schools for the purposes of controlling ill motive behaviors among students. These programmes or forms of punishment have been found to have a certain level of influence in maintaining school safety as well as promoting the teaching and learning processes of students in the school.

The suspension of a student generally occurs when he / she has seriously broken the school rules or in situations whereby allowing a student who has committed a wrong to stay in the school would seriously harm his / her studies or welfare, or the studies or welfare of other pupils. Suspension is generally provided for a given fixed period of time. Moreover, in various circumstances parents may be called to school when their child is given a suspension. They may also be required to report back with their children when the suspension is terminated. This approach of maintaining discipline among students has been gearing up a heated debate on whether it is proper in

ensuring school safety as well as promoting the properness of teaching and learning processes in schools. According to Arcia (2007), the properness of school suspensions in promoting school safety has been considered as a widespread concern since it disrupts the continuity of learning of the affected learner.

In a study carried out by Lynch, Toulon, Carillo and Elsa-Sofia (2010) to investigate the properness of suspension programme on school safety, consisting of 200 students (107 males and 93 female) in the Cumuy Public School District in Puerto Rico, lower income students were “more likely” to be suspended with males being suspended more than females. A 2 x 2 ANOVA was conducted to investigate student perceptions of the properness of suspension on school safety. It showed a significant difference between suspended students and non-suspended students’ views on school safety. Non-suspended students agreed the properness of suspensions promoted school safety while suspended students disagreed.

The component of school safety through the use of suspension or expulsion has been viewed negatively by various students in regard to promoting school safety. According to Kisantas, Ware and Martinez-Arias (2004), the views of students on the fairness of discipline procedures in schools, influences their perception of school safety within the school. Males are more likely than females to drop - out of school because of behaviour problems, which result in suspension. This suggests that suspension may not be a proper motivating factor for student to improve their behaviour or academic performance. There are quite a number of programmes which may be introduced or continue to be applied in secondary schools for the purposes of controlling school safety. However, these programmes and rules may be failing to properly address on both school safety and the teaching and learning processes of all

the students. These studies contribute to the current study in that they bring about the clear picture of how programs such as positive healthy school culture, anti-bullying prevention programmes, suspension and expulsion could influence the attitude of students with regard to safe school environment. The current study sought suggestions from respondents on ways that could ensure school safety as well as enhanced the teaching and learning processes in public secondary schools in Nairobi and Nyeri counties.

2.7 Summary of the Key Research Gaps

- i) Findings from previous research indicate that safety of physical facilities such as classroom, dormitories, dining halls, kitchen, laboratories, libraries, toilets and playground are significant in ensuring the safety of learners. However, the reviewed studies did not target public secondary schools in Nairobi and Nyeri counties.
- ii) There is little documented information on how status of physical infrastructure such as classrooms, dormitories, dining halls, kitchen, laboratories, libraries , toilets and playground influences teaching and learning processes in public secondary schools in Nairobi and Nyeri counties.
- iii) Although documented literature indicates that physical facility conditions of schools such as air ventilation, space, quietness and cleanliness is crucial for the learners' health as well as for teaching and learning, scanty documented evidence exists concerning the physical facility conditions of public secondary schools in Nairobi and Nyeri counties

- iv) There is scanty of documented information on social environment issues such as drug and substance abuse, child abuse and how children with special needs are handled in public secondary schools in Nairobi and Nyeri counties.
- v) Reviewed literature indicates that inclusive education is important in ensuring safety of children with special needs. The current study aimed at finding out how public secondary schools in Nairobi and Nyeri counties ensure that children with special needs are included in formal schooling.
- vi) There is paucity of documented information on the influence of social environment safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties.
- vii) Although documented literature indicates that disaster preparedness is crucial in ensuring learners safety in schools, there is little documented literature on disaster preparedness in public secondary schools in Nairobi and Nyeri counties.
- viii) Though documented literature show that parental/ guardian participation in ensuring safety in learning institutions is crucial, little documented information exists on the participation of parents in ensuring learners' safety in the selected public secondary schools in Nairobi and Nyeri counties.
- ix) Although documented literature exists on how programs such as positive healthy school culture, anti-bullying prevention, suspension and expulsion could influence the attitude of students with regard to safe social school environment, little is documented on safety programs to enhance teaching and learning processes in the selected public secondary schools in Nairobi and Nyeri counties.

- x) Due to the differences in the geographical location, the design, the sample involved, data collection instruments, data analysis procedures used, time and the inconsistency of findings of the reviewed studies, the researcher found it necessary to conduct a study and fill the gap on the status of school safety and its influence on teaching and learning processes in public Secondary Schools in Nairobi and Nyeri Counties, Kenya.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter describes the procedures that were used to carry out this study. The chapter is organized according to the following sub-headings: research design, location of the study, target population, sample and sampling procedures, description of research instruments, validity and reliability, piloting of research instruments, data collection procedures, data analysis procedures, logistical and ethical issues.

3.2 Research Design

This study employed a survey research design that combined qualitative and quantitative data collection and analysis techniques. Survey research design involves the collection of data in order to answer questions concerning the present status of the subjects of the study (Gay, 1991, Best and Kahn, 2004, Kothari, 2004 and Orodho, 2009). Quantitative data were generated from the questionnaires and observation guide, while qualitative data were derived from the responses from the interviews and from the open ended questions. According to Gall and Borg (2010), descriptive survey research involves the collection of information from learners, administrators of schools or any other person associated with the educational process. Survey design allows the researcher to collect facts rather than manipulate the variables (Creswell & Plano, 2011). Descriptive survey research allows the research to focus on people, their opinions, attitudes, beliefs, behaviour and motivations (Kerlinger, 2002). Similarly, Best and Kahn (2004) note that a survey looks at the attitudes or views that people have, the processes that are going on and influences that are developing. A survey has enough provision for protection against

bias and maximizes reliability, is cost effective and has the advantage of reaching many people in a short time. The design was, therefore, relevant since the study was interested in establishing the facts as they were in regard to the status of school safety and their influence on teaching and learning processes.

3.3 Variables of the Study

The study has independent and dependent variables. The independent variables comprise the status of school physical infrastructure safety, such as classrooms, dormitories, kitchens and dining halls, laboratories and libraries, toilets and play grounds, and, social environment safety, that included issues of alcohol, drug and substance abuse, child abuse and children with special needs. The dependent variable was teaching and learning processes.

3.4 Location of the Study

The study took place in Nairobi and Nyeri Counties. These two regions were chosen because they represent the two main set-ups of the country – rural and urban. Nyeri County is generally an agricultural rural region and therefore the researcher specifically considered schools in the rural areas, which represented the rural schools set up in the country. Nairobi County is urban and most schools sampled were situated in the urban areas and represented an urban up in the country. The two counties also had safety issues that had interfered with routine activities in schools. According to Wanzala (2017), incidences of safety concerns in Secondary Schools had been a serious concern to parents, teachers and students. In Nairobi and Nyeri counties, school fire tragedy in dormitories had led to the death of students as well as destruction of school property. Wanzala asserts that, In 2016 Giakaibei Boys High School, Nyeri County, got burnt while in September, 2017, Kenyans woke up

to fire tragedy at Moi Girls High School in Nairobi county in which fire gutted down a dormitory and killed nine students. According to reports in the County Director of Education's Offices in Nyeri County for example, cases of students' unrest had been on an upward trajectory. In 2014 there were 16 cases while the following year (2015) these cases increased to 18. In 2016 alone, cases of student unrest had gone up to 43. (CDEs Office, Nyeri, 2016).

Most of the reasons cited for the students' unrest were poor food and environmental safety as well as the influences of drugs and substance abuse. (CDEs Office, Nyeri, 2016). The researcher therefore, used these safety issues in the areas of the study as a justification for the choice of the research locale.

3.5 Population

The study population was all the 293 public secondary schools in Nairobi and Nyeri counties. (71 in Nairobi and 222 in Nyeri).The target population for the present study were the Quality Assurance and Standard Officers(QASOs) for Nairobi and Nyeri counties, Principals, Deputy principals and students.

3.5.1 Schools

This study targeted all (293) public secondary schools in Nairobi and Nyeri Counties (71 in Nairobi and 222 in Nyeri). The schools were categorized into three; Boys' Boarding, Girls' Boarding and Mixed schools. The researcher targeted 32 Boys' boarding, 45 Girls' boarding and 216 mixed public secondary schools in the two counties.(Nairobi;15,20,36; Nyeri; 17,25,180) respectively.

3.5.2 Respondents

These included Principals, Deputy Principals, Students and County quality assurance and standards' officers of the two counties selected for the study. Principals and their Deputies were chosen since they are in charge of school discipline and can provide crucial information regarding students' behavior which could have either positive or negative influences on teaching and learning environment (Mapfumo, 1999). They ensure that there is safety of school facilities. They are therefore instrumental in ensuring school safety to facilitate teaching and learning process.

The study involved all forms 2 and 3 (50155) students from the two counties. Form 2 and 3 students were targeted because they were thought to have stayed in their schools long enough to comprehend safety issue. Form ones were thought to be too new to the school to completely comprehend safety issues in their schools. The form Two's therefore represented the lower form. The form Fours were thought to be too involved with preparation for their final National exams. The form threes' therefore were picked to represent the upper form. Students play an important role in ensuring safety of school environment through various initiatives like; cleaning school premises, minimizing breakages and generally avoiding negative behavior that can lead to safety concerns in schools thus interfering with the normal teaching and learning process.

The County Quality Assurance and Standards officer of Nairobi and Nyeri counties were targeted because they continuously assess implementation of safety policies in schools to ensure provision of quality education (Mapfumo, 1999).

3.6 Sampling Procedures

This section explains how the schools and the respondents were selected for the study. Details of the procedure are discussed in the respective sections.

3.6.1 Sample of Schools, Principals and Deputy Principals

The researcher had a sample of 44 schools (15% of 293); 10 schools from Nairobi and 34 schools from Nyeri, their Principals and Deputy Principals. To obtain this sample, stratified random sampling and proportionate sampling was used whereby all schools were categorized according to the two Counties (Nairobi and Nyeri) and then put into three strata; (Boys Boarding, Girls Boarding and Mixed Schools). Stratified random sampling is an appropriate methodology when proportionate but random selection of respondents from a subgroup is required (Gall and Borg 2010). This method enabled the researcher to select cases in proportion to some characteristics in the population to enhance the quality of the sample (Gorard, 2003). Typically, for stratified random sampling, the same percentage of participants, not the same number of participants, are drawn from each stratum (Patton, 1990). The researcher wrote the names of the schools on pieces of papers and put them in two baskets; one with papers written names of schools from Nairobi and the other papers written schools from Nyeri. Then she randomly picked the stated sample of 44 schools as follows; 2, 3, 5 and 3,4,27 from Boys boarding, girls boarding and mixed schools from Nairobi and Nyeri respectively. The names of the schools on the randomly selected papers formed the sample for the study. (See Table 3.1). Principals and Deputy Principals from these schools were automatically included in the sample.

3.6.2 Sample of Students

The student target population was 50155. To obtain the sample, the researcher used Krejcie and Morgan (1970) Sample Size Determination Table (see Appendix vii). The researcher obtained a sample of 383 form 2 and 3 students. The researcher then used proportionate random sampling to get the required sample of students from the sampled schools according to category and County as stipulated in Table 3.1. Replacement method was used to obtain individual student within each category, from the sampled schools.

3.6.3 Sample of Quality Assurance Officers

The two County Quality Assurance and Standards 'Officers from the area of the study were included in the sample purposively. According to Silverman (2000), purposive sampling helps the researcher choose a case because it illustrates some aspects in which the researcher is interested and in terms of its significance to the research. The two County Quality Assurance Officers from Nairobi and Nyeri counties were involved in the study because they have the responsibility of ensuring that implementation of safety policy as well as quality education is delivered in all learning institutions.

Table 3.1: Sampling Matrix

County	BB				GB				MIXED			
	S/P/DP		Students		S/P/DP		Students		S/P/DP		Students	
	T	S	T	S	T	S	T	S	T	S	T	S
Nairobi	15	2	6274	48	20	3	6527	50	36	5	7282	55
Nyeri	17	3	5234	40	25	4	6258	48	180	27	18580	142
Total	32	5	11508	88	45	7	12785	98	216	32	25862	197

Key:**BB-** Boys Boarding**GB-** Girls Boarding**S / P / DP-** Schools, Principals and Deputy Principals**T-** Total**S-** Sample**Table 3.1.1: Summary of the Sample (n=473)**

Category	Schools	Principals	Deputy Principals	QASO	Students
BB	5	5	5		88
GB	7	7	7		98
MIXED	32	32	32		197
TOTAL	44	44	44	2	383

3.7 Description of the Research Instruments

In this study, three main types of data collection instruments were used. These included questionnaire method, for the purpose of primary quantitative data and interview guides and observation guide for qualitative data. Questionnaires were used for data collection because the study was descriptive and questionnaires have been found to be suitable data collection instruments for descriptive studies (Kothari, 2004 and Orodho, 2009). There was a questionnaire for principals, deputy principals and students. In order to verify the accuracy of the information given by the respondents, the items from the Questionnaire were made as similar as possible except where the response required did not apply to that particular respondent. An

interview guide for the County Quality Assurance and standards' Officers and an observation guide were also used by the researcher to verify the information regarding school safety.

3.7.1 School Safety Questionnaire for Principals, (See Appendix I), Deputy Principals (Appendix ii) and Students (Appendix iii)

The questionnaire was used in this study to collect data from the principals, deputy principals and students in the selected public secondary schools. The questionnaire was considered appropriate for this study because of the following reasons: Its potentials in reaching out to a large number of respondents within a short time, it is able to give the respondents adequate time to respond to the items, it offers a sense of security (confidentiality) to the respondent and it is an objective method since minimal bias resulting from the personal characteristics are found (Owens, 2002).

The first part of the questionnaire was based on the background information of the respondents. This was because personal characteristics affect people's performance in any organization (Okumbe, 1999). The other sections of the questionnaire were presented based on the key research objectives. These included: to assess the status of physical infrastructure safety in public secondary schools in Nairobi and Nyeri counties, to assess the status of social environment safety in public secondary schools in Nairobi and Nyeri counties, to establish the influence of school physical infrastructure safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties, to establish the influence of school social environment safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties and to seek suggestions from respondents on ways

school safety can be enhanced to promote teaching and learning in Public Secondary Schools in Nairobi and Nyeri counties.

3.7.2 School Safety Interview Guide for County Quality Assurance and Standards Officers (see Appendix iv)

The researcher developed an interview guide (See Appendix iv). This was used to collect in-depth information from the County Quality Assurance and Standards' Officers (CQASOs) on their perceptions, experiences and perspectives on the status of school safety in the sampled schools. Interview guide was largely used to complement the questionnaires. The researcher used an interview guide because according to Patton (2002), it is flexible and it makes the interview across participants systematic and comprehensive. An interview guide was, therefore, formulated to make sure that the same information was obtained from the interviewees (Hughes, 2002). It was constructed on the bases of the literature reviewed and the research questions. According to Fontana and Frey (2000), interviews enable the researcher access an individual's constructed reality and interpretation of their own experiences. The interview guide consisted of specific questions that provided answers to the research questions.

3.7.3 Observation Guide for School Safety(see Appendix v)

Use of observation is borrowed from observation research where the researcher simply observes and records the social behaviour of the subjects or the current status of the phenomenon (McNabb, 2004) and (Orodho, 2009).

The observation guide was used by the researcher to obtain direct information from the field on the various issues of school safety. (see Appendix v).In the current

study, Some of the items that were observed included the conditions of the school grounds, classrooms and laboratories, toilets/ pit latrines, school fence, kitchen, dormitories, firefighting equipment, the school site plan and security alarms.

3.8 Validity of the Research Instruments

The researcher gave close attention to the issue of validity of research instruments used in the collection of data. The validity of the instruments was established in two ways. The first method was that of expert judgment. Supervisors, experts from the subject area and Education specialists were consulted to enrich the research instruments and to address any ambiguity that were likely to arise from the research questions. Gay (1991) and Suskie, 1996) suggest that experts can carefully examine all items on the research instrument and give suggestions that enhance validity. According to Patton (2002), no researcher developed test instrument is perfectly valid. Davies and Dodd (2002) further states that a researcher needs some kind of assurance that the instrument being used resulted in accurate conclusion. Expert judgment was sought from University supervisors who gave suggestions on the improvement of the research instruments for the use of the research.

Additionally, stratified random sampling was used in the present study. Secondly, after the pre- testing, the researcher improved the instrument.

3.8.1 Pre-Testing/Piloting study

A pilot study was conducted in four schools. Two schools from each of the counties chosen for the study. The respondents for the pilot study were drawn from the same population from which the final sample was drawn to pretest the questionnaires that were used in data collection for reliability and validity. McNabb (2004) and

Mugenda and Mugenda (2003) argue that questionnaires should be pretested in a selected sample similar to the actual sample but caution against the use of subjects in the main study in the pretest. Further, Gregory (1992) asserts that a pilot study provides data for making estimates of time and the cost for completing various phases of the research. In all, the pilot study allowed the researcher to get suggestive feedback on the survey, to eliminate the biases as well as to revise the questionnaires to improve them in order to capture the required data.

According to Patton (2002), the number of respondents for the pilot study should be between 9-10% of the sample population. In this study, a total of 48 (10%) respondents, 12 from each school in the two counties were selected for the pilot study since the total sample was 473.

3.8.2 Reliability of the Instruments

The researcher, through a pilot study, pre-tested the Principals', deputy principals' and students' questionnaires. For an instrument to be reliable, it should consistently yield the same results when repeated measurements of the same subjects are taken under the same conditions (Nsubuga, 2000). The study employed Test-Rest method to establish the reliability of the questionnaires. The technique involves administering the same instrument twice to the same group of respondents (Gregory, 1992). Respondents from the same secondary schools filled the questionnaires twice at an interval of two weeks. Pearson Product Moment Correlation Coefficient was calculated for each questionnaire. In social sciences, acceptable reliability coefficient ranges from 0.7 to 1.0 (George & Mallery, (2003). Reliability Coefficient for the Principals Questionnaire was 0.867. The others were Deputy Principals' Questionnaire at 0.861 and Students' Questionnaire at 0.938. All the above

Reliability Coefficients were between 0.7 and 1.0 showing that the three questionnaires were reliable.

3.9 Data Collection Procedure

Data was collected in three phases. The first phase involved getting a research permit. After obtaining permission from the supervisors, and school of education, the permit was obtained from the National Council of Science and Technology. Other permits were obtained from County Directors of Education from each county.

The second phase involved making research visits. Upon acquisition of all essential documents, the researcher in person visited all the selected schools in each county. This was done with the aim of self-introduction, explaining the purpose of the study and seeking appointments with the schools' principals, and deputy principals. The CQASOs were also visited and appointments for interviews were booked.

The third phase entailed the administration of data collection instruments. Based on the agreed date and time, the researcher distributed the data collection instruments in the selected schools. Before responding to the questionnaires, the respondents (principals, deputy principals and students) were provided with the instructions on what to do. The researcher also assured them that their identity would not be revealed. While the respondents were filling the questionnaire, the researcher collected data from the field using the observation guide. Numbers were used to identify the respondents. All the completed questionnaires were immediately collected. However, arrangements were made to collect the questionnaires later where it was not possible.

The researcher in person conducted face to face interviews with the County Quality Assurance and Standards Officers (CQASOs). The researcher sought permission from the respective CQASOs to interview them on issues of school safety and how it influenced teaching and learning. They accepted the request since there was prior arrangement. According to Nsubuga (2000), it is necessary that a definite appointment for the interview be made at a time which is convenient to the participant. In conducting the interview, the researcher took into account some guidelines suggested by Leary (2001). They included; creating a friendly atmosphere, adhering to the interview schedule, arranging interview questions in a logical manner, and being careful not to begin with sensitive questions.

All participants were asked similar questions. However, the order of the questions and the exact wording of the questions were left at the discretion of the interviewer (Bryman, 2001). This enabled the researcher flexibility to respond to issues raised by the participants and to ask probing questions. The time of the interview suited the interviewee. Interviews were conducted face- to- face in the CQASOs offices to allow for privacy and quiet atmosphere. According to McMillan and Schumacher (2006), a qualitative researcher should collect data in face- to- face situations by interacting with selected persons in their settings. The researcher, therefore, went in person to each county (Nairobi and Nyeri). According to Greenfield (2002), it does not matter the style of interviewing or the carefulness of the questions posed, the interview will fail if the interviewer does not capture verbatim of the interviewee's words. It is critical that one determines what style of interviewing would be suitable in advance and also which form of recording is most suitable for one's study. In this case, the researcher used tape recording and took notes to capture data. Patton

(2002) emphasizes the importance of field notes especially those that are made immediately after the interview. The interviewees (the CQASOs) were audio taped and transcription of their responses was done directly afterwards. Direct observation was also done by the researcher while conducting the interviews. The researcher listened attentively to the respondents' responses and looked for changes in the participants' body language. These observations during the interviews took place in a naturalistic way.

Henning (2004) observes that while interviews are being conducted, the researcher should take notes about how the interview is progressing. These research notes are normally intended to apply some of the factors that are not verbalized, such as facial expressions, gestures, tone of voice, change of tempo of speech and body language. Hughes (2002) recommends that a tape recorder should not be employed for at least the first five minutes of the interview so that the participant is not edgy, and to create a conducive atmosphere for the interview. The researcher sought permission from the respondents to use a tape recorder in order to enhance capturing of the exact explanations or wordings of some important responses from the CQASOs. The interview enabled the researcher a chance to probe for in-depth information on the status of school safety and how it was influencing teaching and learning processes.

3.10 Data Analysis Procedure

The study produced both quantitative and qualitative data. Quantitative data were obtained using the questionnaires while qualitative data were obtained through the use of the interview schedule and observation guide.

The data collected through questionnaires were first edited to detect errors and omissions and where possible necessary corrections were made (Kothari, 2004). A comprehensive list of categories that were mutually exclusive was then prepared and codes assigned accordingly. Then coded data were analysed using Statistical Package for Social Sciences (SPSS) Version 16.0. The analysed data were presented largely through frequency distribution tables showing percentages and bar graphs.

Qualitative data was collected and obtained through the use of the interview schedule and observation guide as well as any information the researcher gathered that was not expressed in numbers (Tesch, 1990). Narratives and interpretive reports were written to depict the situation as it was on the ground. This data were analysed by first establishing themes, patterns, trends and relationships from the information gathered. Then, the patterns and connections revealed by the data were used to draw conclusions. The qualitative analysed data were presented using narratives and voiced verbatim.

Use of both methods assisted the researcher to obtain a more valid result regarding the status of school safety and its influence on teaching and learning processes in the sampled schools. Qualitative and quantitative data also complemented each other and ensured collection of adequate data. According to Saunders, Lewis and Thornhill (2000), employing multiple methods in the same study enables triangulation to take place, and helps to cancel bias that might have risen during data collection.

Table 3.2 shows how data was analyzed for each research objective

Table 3.2: Data Analysis Framework

Research objectives	Data analysis procedures
1. To assess the status of school physical infrastructure safety in Public Secondary schools in Nairobi and Nyeri Counties.	Data collected was mainly quantitative and analysed using descriptive analysis.
2. To assess the status of school social environment safety in Public Secondary schools in Nairobi and Nyeri Counties	Data collected was mainly quantitative and analysed using descriptive analysis.
3. To establish the influence of physical infrastructure safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri Counties.	Data collected were qualitative and were analysed thematically.
4. To establish the influence of school social environment safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri Counties.	Data collected were qualitative and were analysed thematically and presented using narratives and cited verbatim
5. To seek suggestions from respondents on ways school safety can be enhanced to promote teaching and learning processes in public secondary schools in Nairobi and Nyeri counties.	Data collected were qualitative and were analysed thematically and presented using narratives and cited verbatim

3.11 Logistical and Ethical Consideration

Ethical research is considered as one that does not harm and which gives informed consent and respects the rights of individuals being studied. Ethical issues form an important component of research as far as conduct of researchers is concerned. In

this study, the following ethical considerations were considered: voluntary participation, anonymity, confidentiality and deception.

The principle of voluntary participation posits that respondents should not be coerced into participating in a research. This means that any research should be done with the researcher's consent. The participants should be informed of what the study involves so that they can make their own judgment on their involvement in the study (Trochim, 2006). In the present study, the researcher ensured that the respondents willingly participated in the study. The purpose of the study was explained to the respondents and they were asked to sign an informed consent form (cf. Appendix VI).

The principle of anonymity: This principle posits that the participant will remain anonymous in the course of the study (Punch, 1994). In this study, the respondents were not required to provide their names. They were addressed according to their designations, that is, as students, Deputy Principals and Principals.

Confidentiality: In order to protect the privacy of the participants, confidentiality was guaranteed by assuring the respondents the information provided would be used only for academic purpose.

Deception: Unethical behaviour occurs if the researcher fails to disclose the real purpose of the research because of the fear of the respondents' refusal to participate. In order to avoid the element of deception, the researcher explained the purpose of the study to the respondents.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

The purpose of the study was to determine the status of school safety and its influence on teaching and learning processes in public secondary schools in Nairobi and Nyeri Counties, Kenya. This chapter presents findings, interpretations and discussions based on the following study objectives:

- 1 The status of school physical infrastructure safety in public secondary schools in Nairobi and Nyeri counties;
- 2 The status of school social environment safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties;
- 3 The influence of school physical infrastructure safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties;
- 4 The influence of school social environment safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties;
- 5 The suggestions from respondents on the ways schools safety can be enhanced to promote teaching and learning processes in public secondary schools in Nairobi and Nyeri counties.

Information gathered to address study objectives is organized according to the research questions, while background information regarding respondents is presented in the first section.

4.2 Background Information about the Respondents

Background information about the characteristics of respondents is crucial to any research as it influences the way information is perceived (Okumbe, 1999). Information obtained was derived from the completed questionnaires for the students, Deputy Principals and Principals, and interview guide for County Quality Assurance and Standards officers (CQASOs). Frequencies and percentages are used to describe demographic data of the respondents.

4.2.1 Students' Background Information

The study sought information regarding students' gender, age and the type of school. The information gathered is important to the study as it sheds light on how these variables relate to school safety. Information on students' gender and age is presented in Table 4.1.

Table 4.1: Students' Gender and Age

	f	(%)
Gender		
Male	169	47
Female	189	53
Age		
14-16 Years	74	20.7
17-18 Years	182	50.8
Above 18 Years	102	28.5

Table 4.1 shows that 189 (53%) of the sampled students were female while 169 (47%) were male. The findings show that majority of the students, that is, 182 (50.8%) who were drawn from forms 2 and 3 were aged between 17-18 years while

74 (20.7%) were between 14-16years. There were 102 (28.5%) students who were 18 years and above.

The findings of the study indicate that there were more female students than males. This could point to the fact that many boys in the study locale may have dropped out of school in form two to engage in income generating activities. These findings are supported by a study done in Makueni (Kaindi, 2015) that sought to find out why boys were dropping out of school in which one of the reasons highlighted was that boys engaged in income generating activities to supplement the meagre earnings of their parents. According to Gatua (2013), engaging children in income generating activities during school time denied them their right to education and hence can be regarded as unhealthy. It is also against the Universal Declaration of Human Rights (Article 26 of 1998) which states that everyone has the right to education.

The findings also indicate that there were students who were above seventeen years of age in form two and form three. The presence of students who were 18 years and above indicates that students were either joining class one at more than six years of age or there was class repetition. According to the Basic Education Act (2013), learners are supposed to join class one at six years of age. This would mean that students in form 2 and 3 should be between ages 15-16 years. These findings could also indicate wastage in the education cycle, in the schools under study, since such students are supposed to have already joined university or other tertiary institutions of learning. Having students who are above the age of their colleagues in the same class could lead to serious implications on school safety because older students tend to have difficult relationship with those in authority as compared with the younger ones. The presence of students who are over 18years in form two and three could

also pose challenges when enforcing discipline as older adolescents are exposed to more substance abuse at school which may lead to delinquent behaviour (Johnston, O'Malley & Bachman, 1995).

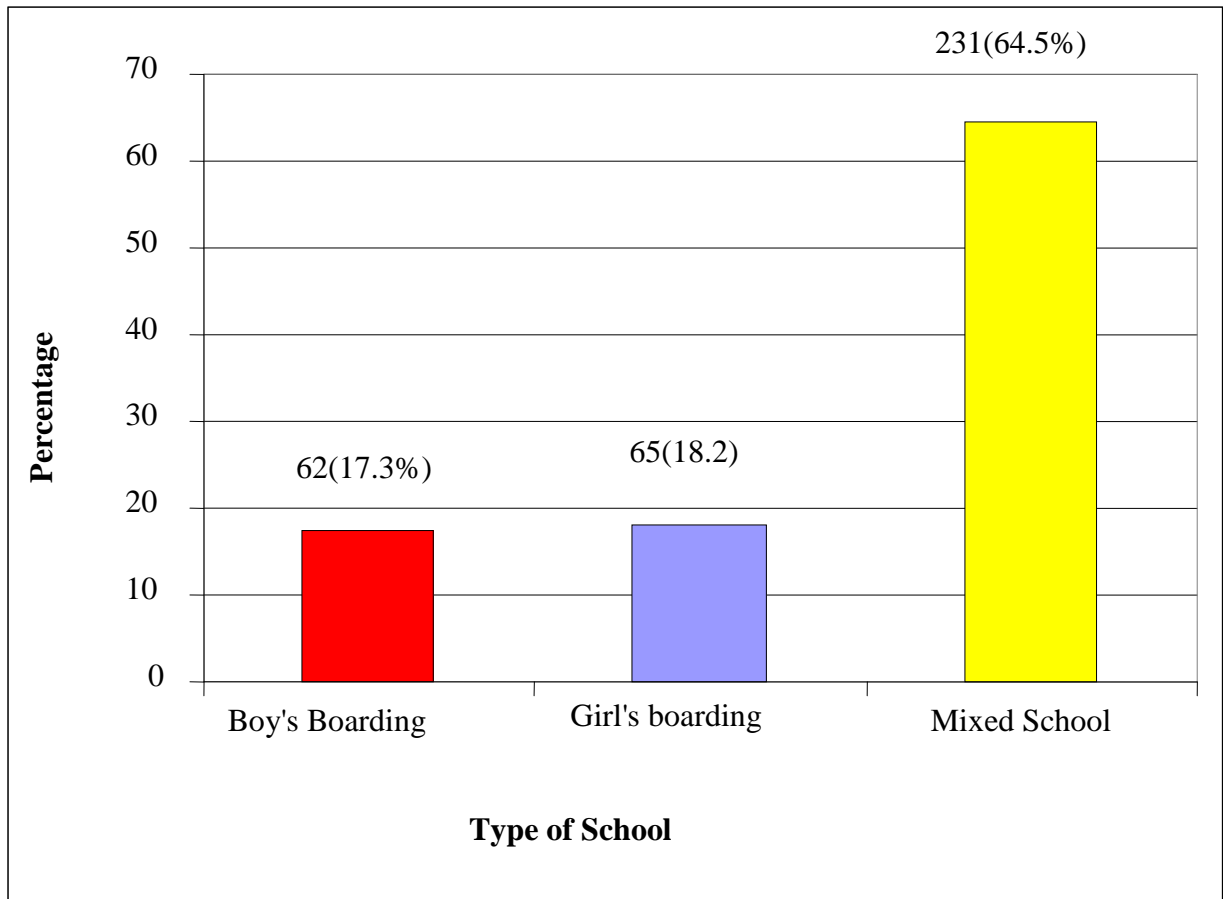


Figure 4.1: Distribution of Students by Type of the School

Figure 4.1 indicates that 231(64.5%) of the students were from mixed day schools while 62 (17.3%) boys and 65(18.2%) girls were from boarding schools. The findings of the study indicate that there were more students from mixed day schools than from boarding schools. This could be attributed to the general perception that living conditions in boarding schools were horrible and often led to students' unrest. This view is supported by Waihenya (2016) who notes that day scholars in public schools do not experience frustrations witnessed by their counterparts in boarding

schools. Waihenya also adds that to nip students’ unrest in the bud, schools should improve living conditions in public schools. Waihenya also notes that dormitories in most schools are cluttered, putrid, and filthy and that is why they are seen as “the eternal symbol of bondage and it is little wonder they are the first to go up in flames” (p. 5).

4.2.2 Deputy Principals, Principals and Quality Assurance and Standards officers (QASOs)s’ Background information

The study sought information regarding Principals, Deputy Principals and Quality Assurance and Standards officers’ gender, working experience, duration in years they had worked in the current station and their academic qualification. The information obtained is as presented in Table 4.2.

Table 4.2: Deputy Principals and Quality Assurance and Standards officers’ gender

	Deputy Principals’		Principals		CQASOS	
	f	%	f	%	f	%
Male	22	55.0	23	56	-	
Female	18	45.0	18	44	2	100

Table 4.2 indicates that 22(55%) of the Deputy principals were male and 18 (45%) were female, 23(56%) Principals were male while 18 (44%) were female. All the 2(100%) Quality Assurance and Standards Officers were female.

Table 4.3:Deputy Principals and Quality Assurance and Standards officers’ Working Experience

YEARS	Deputy Principals’		Principals		CQASOS	
	f	%	f	%	f	%
1-4	15	37.5	6	14.6		
5-8	10	25.0	7	17.1		
9-12	10	25.0	7	17.1		
13-16	-		8	19.1		
17-20	-		7	17.1	2	100
Above 20	5	12.5	6	14.6		

Table 4.3 indicates that 5 (12.5%) of the Deputy Principals and 6 (14.6%) of the Principals had a working experience of above 20 years, 10 (25%) of the deputy principals and 22(53.6%) of the principals between 9 and 20 years, while the CQASO had a working experience of between 17-20 years. The table further shows that 25(62.5%) of the Deputy Principals and 13 (31.7%) of the Principals had a working experience of below nine years.

Table 4.4: Deputy Principals and Quality Assurance and Standards officers’ No. of years worked in current station

years	Deputy Principals’		Principals		CQASOS	
	f	%	f	%	f	%
1-5	28	70.0	12	29.3	1	50
6-10	4	10.0	16	39.0	1	50
11-15	3	7.5	5	12.2	-	
16-20	3	7.5	5	12.2	-	
Above 21	2	5.0	3	7.3	-	

In reference to duration in years that the Deputy Principals, Principals and CQASOs had worked in the current station, the findings on Table 4.4 indicate that 28 (70%) of the Deputy Principals, 12 (29.3%) of the Principals and 1(50%) had served in their current station for between 1-5 years. 4 (10.0) of the Deputy Principals, 16 (39.0%)

of the Principals and 1(50%) had served for between 6-10 years. 3 (7.5%) of the Deputy Principals and 5 (12.2%) of the Principals for between 11-15 years, 3 (7.5%) of the deputy Principals and 5 (12.2%) of the Principals for between 16-20 years, while 2 (5%) of the Deputy Principals and 3 (7.3%) of the Principals had served in their current station above 21years.

Table 4.5: Deputy Principals and Quality Assurance and Standards officers' Academic Qualifications

LEVEL	Deputy Principals'		Principals		CQASOS	
	f	%	f	%	f	%
PhD	2	5.0	-		-	
M.Ed	2	5.0	18	43.9	2	100
MBA	1	2.5	3	7.3	-	
M.Sc	-		3	7.3	-	
B.Ed	34	85.0	17	41.5	-	
Diploma	1	2.5	-		-	

In reference to the highest academic qualifications, Table 4.5 indicates that 34 (85%) of the Deputy Principals and 17(41.5%) of the Principals had a Bachelor of Education Degree, 2 (5%) of the Deputy Principals, 18 (43.9%) of the Principals and 2(100%) of the CQASOs had a Master of Education degree, 1 (2.5 %) of the Deputy Principals and 3 (7.3%) of the Principals had a MBA, 3 (7.5%) of the Principals had a M.Sc and 1 (2.5%) of the Deputy Principals had a Diploma while 2 (5%) of the Deputy Principals had a PhD degree in education while none of the Principals had a Ph.D degree.

The findings on gender indicate that there were more male principals than female Principals as well as more male Deputy Principals than female Deputy Principals. This scenario could be attributed to the possibility that authorities concerned, either

do not consider gender balance while placing people in school leadership or women rejecting headship position due to the roles they play in their families. These findings are in agreement with Coleman (2003) who observed that women are underrepresented at headship in many parts of the world since they encounter challenges while trying to balance their families and career.

The findings on working experience indicate that a sizeable percentage had served for thirteen years and above. This could suggest that promotion to headship was mostly based on the length of service held by a teacher. It could also explain the perception held by many administrators that an officer who had served for a long period of time had gained experience which was associated with implementation of existing policies. The findings concur with Gyekye and Salminen (2010) who argued that there was a relationship between the levels of workers' experience and perception of safety on workplace. On the one hand, Gyekye and Salminen (2010) noted that workers who are more experienced had positive perspectives in regard to safety than their inexperienced workers. The more experienced workers, therefore, observed safety policies and recorded the lowest involvement in accidents. On the other hand, workers who are inexperienced, specifically those in their workplace in their first year, were the worst perpetrators in regard to perception of safety and observance with safety policies. This is because the workers with more experience benefited from their long duration of stay in their organizations. They had, therefore, acquired the requisite job-related and organizational knowhow and awareness of the safety culture of the organization.

However, the small percentage of Principals and Deputy Principals that had served in their current stations for more than 21years could imply slow progress of the

institution due to complicity as stated by Carter (2001) that the more a principal stayed in one school, the more they got used to it and the more they compromised its functionality. The findings on the number of years the administrator served in the current station however, contrast with the views by Cark. Martorell and Rockoff (2009) who found little evidence of any association between principal's work experience at the current school and school performance.

The study sought to establish the level of education for the Principals, Deputy Principals and CQASOs because level of education is a key criterion used to make decisions on who gets to management positions (TSC, 2005). The findings indicate that all the Principals and Deputy Principals except one, and the CQASOs had attained the minimum qualifications of a bachelor's degree required by the Ministry of Education. It can, therefore, be deduced that Principals and Deputy Principals and the CQASOs were qualified to implement government policies in schools and the information received from them was credible enough to help the researcher assess school safety and its influence on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties in Kenya.

4.3 The Status of School Physical Infrastructure Safety in Public Secondary Schools in Nairobi and Nyeri Counties

The first objective of the study sought to assess the status of school physical infrastructure safety in public secondary schools in Nairobi and Nyeri counties. To realize this objective, the study was guided by the following research question:

What is the safety status of school physical infrastructure in public secondary schools in Nairobi and Nyeri Counties?

School Physical Infrastructure has an influence on students' academic performance. Safe facilities are required in order to facilitate teaching and learning in educational institutions. They ought to be well planned, spacious, and functional and with pleasing architectural feature (Lupinacci, 2002). According to the Ministry of Education Safety Standards Guidelines for schools in Kenya (2008), School physical infrastructure should be appropriate, adequate and properly located devoid of any risks to users or to those around them.

The study, therefore, sought to establish the safety of the following school physical Infrastructure; classrooms, dormitories, dining halls, kitchens, laboratories, libraries, toilets and play ground.

4.3.1 Safety status of Classrooms in Public Secondary Schools in Nairobi and Nyeri Counties

Information gathered from the respondents regarding safety of classrooms is presented in Table 4.6.

Table 4.6: Students', Deputy Principals' and Principals' Response on Classroom Safety

Statements	Students (n=358)						Deputy Principals (n=40)						Principals (n=41)					
	A		NS		D		A		NS		D		A		NS		D	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1 Classroom accommodates forty students	60	17.4	22	6.1	276	77.1	12	30	-	-	28	70	10	24.	-	-	31	75.6
2 Classrooms are well ventilated to allow proper air circulation	25	6.9	11	3.1	322	90.0	4	10.0	1	2.5	35	87.5	6	14.6	1	2.4	32	82.9
3 Classroom windows and doors have grills	156	43.6	42	11.7	160	44.7	21	52.5	2	5.0	17	42.5	21	51.2	4	9.8	16	39.02
4 Classroom doors and windows open outwards	14	3.9	17	4.7	327	91.3	4	10.0	1	2.5	35	87.5	5	12.1	-	-	36	87.8
5 Furniture in the classrooms is appropriate	227	63.4	46	12.8	85	23.8	31	77.5	3	7.5	6	15.0	34	83.0	2	4.9	5	12.2
6 Classrooms are clean and well maintained	272	75.9	33	9.2	53	14.8	31	77.5	2	5.0	7	17.5	35	85.4	-	-	6	14.6

LEGEND

A- Agree

NS-Not sure

D-Disagree

According to Table 4.6, 276(77.1 %) of the students, 28 (70%) of the Deputy Principals and 31 (75.6%) of the Principals disagreed that each classroom accommodated forty students because there were fifty to fifty-five students in most of the classrooms. This was supported by one CQASO who stated that:

Most schools started with forty students in a class. However, currently the student population in a class has increased such that classrooms can accommodate as many as sixty students and this is quite unhealthy because of poor ventilation. The movement of both the teacher and the learner is also limited.

The researcher confirmed the statement made by the CQASO as 20 classrooms in 30 schools were found with student population of between 50 and 60.

Table 4.6 further indicates that many of the respondents, that is, 322 (90%) of the students, 35(87.5%) of the Deputy Principals and 32 (82.9%) of the Principals disagreed to the statement that classrooms were well ventilated to allow proper air circulation. The researcher also observed that 50% of the classrooms in the schools selected for the study were congested and windows could not open since they were tightly fixed with wires. This made it impossible to have enough fresh air or lighting, especially at the back of the classrooms.

Responding to whether classroom windows and doors had grills, a substantial number of respondents, that is, 156(43.6%) of the students, 21 (52.5%) of the Deputy Principals, and 21 (51.2%) of the Principals, agreed to the statement. The observation made confirmed that 66.6% of the selected schools had not removed the grills from the classroom windows and doors, as had been directed by the Ministry of Education.

According to majority, that is, 327 (91.3%) of the students, 35 (87.5%) of the Deputy Principals and 36 (87.8%) of the Principals, classroom doors were not designed to open outwards as required in the safety guidelines. It was encouraging however, to note that 227(63.4%) of the students, 31 (77.5%) of the Deputy Principals and 34 (83.0%) of the Principals agreed that furniture in the classrooms was appropriate. The findings further indicate that 272(75.9%) of the students, 31 (77.5%) of the Deputy Principals and 35 (85.4%) of the Principals were of the opinion that classrooms were clean and well maintained to support students' teaching and learning. However, observations made by the researcher showed that in three schools, classrooms furniture was inappropriate and cleanliness was not well maintained, as papers, broken chairs and desks littered the floor.

Figure 4.2 is an illustration of a window with grills while Figure 4.3 shows how a safe classroom window should be (without grills). Figure 4.4 shows how a safe classroom door should open (towards outside) while Figure 4.5 illustrates a classroom door opening towards inside. This is a clear indication that some schools are still unsafe since they have not adjusted the windows and doors according to the Ministry of Education guidelines.



Figure 4.2: An Example of a Classroom Window with Grills



Figure 4.3: An Example of a Classroom Window without Grills



Figure 4.4: An Example of a Classroom Door Opening Towards Outside



Figure 4.5: An Example of a Classroom Door Opening Towards Inside

From these findings, it is evident that classroom safety was not upheld since thirty (68%), out of forty four classrooms were congested, had poor lighting and ventilation, windows and doors had grills and did not open outwards. Congested classrooms are unhealthy to learners as spread of airborne diseases occurs in such places. These findings are contrary to safety policy that states that classrooms must not be congested and should accommodate students comfortably. In addition, the findings of the present study are supported by Oluremi (2012) who noted that congested classrooms are unfriendly to learners since behavioral problems like truancy, violence; gang participation and substance usage are attributed to large classroom population. According to Kimmel (2000) and Khattar (2003), classroom ventilation allows proper air circulation thereby contributing to good health.

Congestion in the schools under study could be attributed to increased school enrolment due to the government's initiative to provide subsidized day secondary education. According to Muindi (2012), increased enrolment in Kenyan schools did not match available physical infrastructure since the former overstretched resources meant for funding construction of physical infrastructure and thus exposed learners to risky situations while at school. Gatua (2015) observes that in most schools, classrooms were not adequate as compared to enrolment; furniture was inadequate, inappropriate to the size of users and poorly maintained with evidence of breakage that had not been addressed. Gatua also notes that most windows had no glasses and had no blinds to protect students from glare and heat from the sun.

The findings on whether the doors and windows had grills contravene the safety policy that states that doors and windows have to be without grills to allow for easy escape in case of a disaster. The presence of grills on the doors and windows in the

schools under study indicated that the administrators had not taken seriously the Ministry of Education Safety guidelines and this could compromise safety of learners and hamper teaching and learning process. As Soughnessy et al (as cited in Salleh, Kamaruzzaman & Sulaiman, 2011, p.418) note, indoor air pollutant might increase the chance of both long and short term health problems among pupils and staff and reduce the productivity of teachers and degrade the pupil's learning environment and comfort. Similarly, Ali, Kim and Ryu (2016) posit that ambient conditions stimulate the five senses which facilitate learning. Heesup et al (2017), too, argue that students' health may be affected by how the classroom is designed.

4.3.2 Safety Status of Dormitories in Public Secondary Schools in Nairobi and Nyeri Counties

Table 4.7 highlights responses of the students, Deputy Principals and Principals on dormitories safety:

Table 4.7: Students', Deputy Principals' and Principals' Responses on Dormitories Safety

Statements	Students (n=358)						Deputy Principals (n=40)						Principals (n=41)					
	A		NS		D		A		NS		D		A		NS		D	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1 There is enough space between the beds in the Dormitories	142	39.6	158	44.1	58	16.2	14	35.0	21	52.5	5	12.5	18	43.9	17	42	6	14.6
2 Dormitories are well ventilated to allow circulation of air	163	45.5	149	41.6	46	12.8	14	35.0	-	-	26	66.0	17	41.5	19	46	5	12.2
3 Dormitories have two exits and an emergency exit at the middle	109	30.4	146	40.8	103	28.8	14	37.5	20	50.0	5	12.5	22	53.7	17	42	2	4.8
4 Triple decker are not found in the dormitories	80	22.4	144	40.2	134	37.5	7	17.5	21	52.5	12	30.0	10	24.4	18	43	13	31.7
5 Dormitory doors open outwards	176	49.2	140	39.1	42	11.8	19	47.5	20	50.0	1	2.5	21	51.3	18	43	2	4.8
6 There are fire extinguishers in the dormitories	96	26.8	139	38.8	123	34.4	15	37.5	19	47.5	6	15.0	17	41.5	20	49	4	9.7
7 Dormitories are clean and well maintained	174	48.6	153	42.8	31	8.7	21	52.5	-	-	19	47.5	21	51.3	17	42	3	7.3

LEGEND

A- Agree

NS-Not sure

D-Disagree

As indicated in Table 4.7, 142 (39.6%) of the students, 14 (35.0%) of the Deputy Principals and 18 (43.9%) of the Principals agreed to the statement that there was enough space between the beds. The researcher observed that most dormitories were congested and the little available space was used to store learners' boxes. County Quality Assurance and Standards Officer also had this to say regarding congestion in the dormitories:

In some schools the space between the beds is very tiny posing problems of movement to the students. Cleaning is a problem as well since cleaners are unable to reach the corners. This leads to many dormitories being infested by rodents, cockroaches and bedbugs.

Responding to the statement that dormitories were well ventilated to allow proper air circulation, 46 (12.8%) of the students, 26 (66%) of the Deputy Principals and 5 (12.2%) of the Principals disagreed that the dormitories were well ventilated to allow proper air circulation. The researcher observed that 28 out of the 44 sampled schools had poorly ventilated dormitories. The County Quality Assurance and Standards' Officer said that "some dormitories were built many years ago and the contractor had failed to consider some construction specifications".

Table 4.7 further indicates that 134(37.5%) of the students, 12 (30%) of the Deputy Principals and 13 (31.7%) of the Principals disagreed to the statement that triple-deckers were not found in the dormitories, revealing that triple deckers were used. This revelation that the dormitories were unsafe was further strengthened by the fact that 109(30.4%) of the students, 14 (37.5%) of the Deputy Principals and 22 (53.7%) of the Principals stated that dormitories had two exits and an emergency exit at the middle. Similarly, only a small percentage of the respondents, that is, 176 (49.2 %) of the students, 19 (47.5%) of the Deputy Principals and 21 (51.3%) of the

Principals agreed that dormitory doors opened outwards. The findings further indicate that a considerable number of all respondents in the sampled schools that is, 178(33.0%) were not sure whether dormitory doors opened outwards. This kind of ignorance could imply that Deputy Principals and Principals in such schools were not fully committed to ensuring school safety. However, the researcher observed that majority of the schools had adjusted their doors to open outwards or were in the process of doing so. This observation was supported by one CQASO who stated that “most schools had tried to observe the requirement and that, the only problem was that some Principals, especially in girls’ schools, still locked the dorms from outside at night when the girls were asleep”. This according to the Principals was to ensure safety. Their argument was that in case of an emergency, the students could use the emergency door for escape. However, the problem was that the emergency doors in most schools were inaccessible due to litter that was piled next to the emergency door or boxes and cleaning equipment that were kept there.

Table 4.7 further indicates that only a small number, that is 96 (26.8%) of the students, 15 (37.5%) of the Deputy Principals and 17(41.5%) of the Principals agreed that there were adequate fire extinguishers in the dormitories. The researcher observed that only eight schools out of the sampled forty four schools had fire extinguishers that were functioning and the rest of the schools had either poorly maintained or non-functioning ones. It was the feeling of 174 (48.6%) students, 21(52.5%) of the Deputy Principals and 21 (51.3%) of the Principals that dormitories were clean and well maintained. The observation made by the researcher was that in ten of the schools sampled, two dormitories were untidy with unkempt

beds, broken pieces of furniture and hanging electrical wires, four had dirty floors and broken window panes while two had uneven floors.

Figure 4.6 shows a dormitory with triple deckers that had weak front- grills. This is a clear indication that some schools had triple deckers, yet the safety manual indicates that there should be double deckers supported by firm side-grills. Although some upper beds were not in use at the time of data collection, the researcher observed that the side-grills were missing and instead, there were weak grills attached at the front of the beds. Figure 4.7 shows a clean and spacious dormitory. However, the double deckers are without side-grills.



Figure 4.6: An Example of a Congested Dormitory with Triple Deckers with Weak Front- Grills



Figure 4.7: An Example of a Clean and Spacious Dormitory with Double Deckers but without Side-Grills

From the findings of the study concerning dormitory safety, it is clear that many were congested, had poor ventilation, triple deckers existed without proper support of side-grills, fire extinguishers were lacking or were not operating and that cleanliness was wanting. This compromised the safety of the learners since a congested dormitory does not promote hygiene.

The findings of this study are in agreement with Mgadla (2006) who notes that overcrowding in boarding schools in Kenya, especially those in informal settlement promotes moral decay among students especially when they are allowed to share beds. The findings also concur with those of a study by Gatua (2015) that noted that firefighting equipment were not available in majority of the schools and where available were inadequate, not serviced and non-functional. According to Omolo and Simatwa (2010), dormitories should be fitted with an emergency door since this

door provides an alternative during emergencies and failure to observe this can compromise security of students. Maritim, King'oo and Barmao (2015) note that tragic fires, as well as school violence and unrest, have heightened the need for crisis and emergency preparedness in Kenya. There is no longer a guarantee that schools can remain safe from the tumultuous violence present in today's world. Schools must, therefore, be prepared for a wide range of emergency situations and especially where dormitory safety is concerned.

4.3.3 Safety Status of Dining Halls and Kitchens in Public Secondary Schools in Nairobi and Nyeri Counties

The study also sought information from respondents on dining hall and kitchen safety facilities in public secondary schools in Nairobi and Nyeri counties. The information collected is presented in Table 4.8.

Table 4.8: Students', Deputy Principals' and Principals' Responses on Dining Hall and Kitchen Safety

Statements	Students (n=358)						Deputy Principals (n=40)						Principals (n=41)					
	A		NS		D		A		NS		D		A		NS		D	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1 Dining Halls are spacious to accommodate students comfortably	101	28.2	74	20.7	183	51.1	11	27.5	10	25.0	19	47.5	12	29.3	5	12.2	24	58.5
2 Dining halls are clean and well maintained	78	21.8	74	20.7	206	57.6	11	27.5	6	15.0	23	57.5	17	41.4	6	14.6	28	68.3
3 Dining hall has appropriate Furniture	104	40.8	76	21.2	178	49.7	14	35.0	-	0.0	26	65.0	19	46.4	24	58.5	20	48.8
4 School kitchen is large enough for the staff to work comfortably	237	66.2	43	12.0	78	21.8	22	55.0	4	10.0	14	35.0	27	65.8	4	9.8	10	24.4
5 There is proper storage of food	52	14.6	52	14.5	25	7.1	114	28.5	25	62.5	25	62.5	10	24.4	-	0.0	31	75.7
6 Kitchen is clean and well maintained	38	10.6	47	13.1	24	6.7	9	22.5	25	62.5	29	72.5	15	36.5	12	29.3	25	61.0

LEGEND

A- Agree

NS-Not sure

D-Disagree

From Table 4.8, the responses to the statement that dining halls were spacious enough to accommodate students comfortably indicate that, 183 (51.1 %) of the students, 19 (47.5%) of the Deputy Principals and 24 (58.5%) of the Principals disagreed. This suggests that some of the schools sampled did not have spacious dining halls in place. This was supported by the observation which established that in two schools there were tiny semi-permanent dirty dining halls which could not accommodate all students, while ten other schools did not have a dining hall at all. This forced student to eat their meals in open space that were exposed to dust and other food contaminating elements. The study further established that, 206 (57.6%) of the students, 6 (15.0%) of the Deputy Principals and 28 (68.3%), of the Principals disagreed that dining halls were clean and well maintained.

Responding to the statement that dining halls had appropriate furniture, 178(49.7%) of the students, 26 (65%) of the Deputy Principals and 20 (48.8 %) of the principals disagreed. The findings were supported by the observation made by the researcher which revealed that six schools out of the forty four schools sampled had inadequate chairs and tables. Generally, the furniture did not match the school enrolment in that most students did not have proper tables and chairs to use. The researcher witnessed students having their meals while standing.

Table 4.8 further indicates that 237 (66.2%) of the students, 22(55.0%) of the Deputy Principals and 27 (65.8%) of the Principals agreed that kitchens were large enough for kitchen staff to work comfortably. However, according to the observations made by the researcher, kitchens in twenty-three schools out of the forty four schools sampled were tiny, had ceilings that were leaking and suitable ventilation to create a safe and comfortable working environment was lacking.

Slightly more than half of the respondents, that is, 254 (71%) of the students, 25 (62.5%) of the Deputy Principals and 31 (75.7%) of the principal disagreed that there was proper food storage in the schools under study. The researcher found in six schools, bags of dry maize placed on the floor while eight stores had dirty food storage facilities. The investigator's findings were further confirmed by one CQASO's response who noted that there was poor storage of both dry and refrigerated food in schools in their county and food storage facilities were not cleaned regularly.

Responding to whether school kitchens were clean and well maintained, 243 (76.2%) of the students, 29 (72.5%) of the Deputy Principals and 25 (51.0%) of the Principals, disagreed to the statement. The findings were supported by observation where fifteen schools were found to have dirty, dusty and poorly maintained kitchens.

Figure 4.8 shows an example of a clean and spacious dining hall while Figure 4.9 shows a squeezed dining hall with very low tables that make it uncomfortable for the users. Figure 4.10 illustrates a properly raised grain storage facility that ensures the grains remain safe and dry.



Figure 4.8: An Example of a Clean, Spacious Dining Hall with Appropriate Furniture



Figure 4.9: An Example of a Dirty Squeezed Dining Hall with Inappropriate Furniture



Figure 4.10: An Example of Properly raised Storage Grain Facility

Figure 4.11 shows an example of an open drainage with dirty water from the kitchen and dining hall. Exposure of food to dirty water may lead to food contamination and this is hazardous to students' health.



Figure 4.11: An Example of a Dirty, Open Drainage Channel to Dispose Waste Water from a Dining Hall

The findings of the study indicated that dining hall safety in the sampled schools was wanting. This is because ten schools (28%) of the schools sampled had no dining halls while dining halls in two schools were small, dirty and had inappropriate furniture. This means that the students were uncomfortable when taking their meals and they were at risk of suffering from food poisoning or contracting airborne diseases. In order for students to eat and enjoy their meals, there is need to have a clean and spacious dining hall with appropriate furniture where all students can eat together (MOE, 2008).

These findings of the present study are in agreement with Dewees' (1999) view that learners will appreciate, feel safe and be motivated by the right atmosphere and organisation in their dining hall. Jagero (2011) also argues that students who eat from open and unsafe places could get food poisoning. Rossi, Beilke and Barreto (2017) also note that failure in observing good manufacturing practices will increase the risks of food contamination in schools.

The findings on kitchen safety indicate that policy guidelines were grossly ignored since many of the sampled had small kitchens, poor storage facilities and were not clean or well maintained. According to the Ministry of Education School safety guidelines, safe school kitchens are supposed to provide enough room for staff to work comfortably, have proper storage facilities as well as be clean and well maintained (MOE, 2008). The conditions of kitchens in majority of schools under study could lead to poor hygiene especially when preparing food. According to Reid (2000), since cooking and catering can produce significant amounts of fumes and vapor as well as large amounts of heat, there is a need to have enough room for staff to work comfortably and a safe and proper storage of food.

4.3.4 Safety Status of School Laboratories and Libraries in Public Secondary Schools in Nairobi and Nyeri Counties

According to Kandel, Neupane and Giri (2017), school laboratories are critical in a learning institution. The information gathered regarding school laboratories and libraries is presented in Table 4.9.

Table 4.9: Students', Deputy Principals' and Principals' Responses on School Laboratories and Libraries Safety

Statements	Students (n=358)						Deputy Principals (n=40)						Principals (n=41)					
	A		NS		D		A		NS		D		A		NS		D	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1 School laboratories are spacious enough for students to learn safely	45	12.6	21	5.9	292	81.6	7	17.5	1	2.5	32	80.0	6	14.6	-	35	85.3	
2 Laboratories have appropriate furniture	297	83	24	6.7	37	10.4	32	80.0	1	2.5	7	17.5	35	85.3	-	6	14.6	
3 There are rooms with cupboards for proper storage of chemicals	21	5.9	27	7.5	310	86.6	6	15.0	3	7.5	31	78.0	5	12.2	2	4.9	34	82.9
4 There are proper firefighting facilities in the laboratories	73	20.4	44	12.3	241	67.3	6	15	7	17.5	27	67.5	11	26.8	1	2.4	29	70.7
5 Laboratories assistants are trained	286	79.9	46	12.8	26	7.3	30	75.0	4	10.0	6	15.0	31	75.6	4	9.8	6	14.6
6 School libraries is large enough to accommodate students at one given time	45	22.1	68	19.0	245	68.3	14	35.0	-		26	65.5	11	26.8	3	7.3	27	65.8
7 Libraries are well ventilated	101	28.2	52	14.5	205	57.2	15	37.5	-		25	62.5	12	29.3	1	2.4	28	68.3
8 School library is well equipped with relevant learning materials	70	19.4	7	1.9	281	78.5	7	17.5	5	12.5	28	70.0	13	31.7	-	28	68.3	

LEGEND

A- Agree

NS-Not sure

D-Disagree

Table 4.9 indicates that an overwhelming number, that is, 292(81.6%), of the students, 32 (80.0%) of the Deputy Principals and 35 (85.3%) of the Principals, disagreed to the statement that laboratories were large enough to accommodate forty students safely. These findings were supported by the researchers' observation of one teacher found attending to more than fifty students during a practical lesson. This was further supported by one CQASO who, during an interview, commented that "inadequate and squeezed laboratories are major contributing factors to lack of safety and breakages of equipment during practical lessons in schools under my jurisdiction."

Some of the students, Deputy Principals and Principals, that is 297(82.9%), 32 (80.0%) and 35(85.3%) respectively agreed to the statement that there was appropriate furniture in the laboratory. Contradicting views were expressed by one CQASO during the interview who postulated that "in some schools in my area, laboratory stools and tables are few, inappropriate and poorly maintained". Observations made by the researcher were in line with the views of the CQASO as three schools were found to have broken stools while tables were too rough and often tore students' writing materials as well as the sleeves of their sweaters.

Stating their level of agreement, a large number of students, that is, 310 (86.6%), 31 (78%) of the Deputy principals and 34 (82.9%) of the Principals, disagreed that there were rooms with cupboards for proper storage of chemicals in the laboratories in the schools under study. The researcher observed that in one of the sampled schools, some chemicals had been placed on the floor in a small room. This was found to be dangerous as some of these chemicals were likely to react if they spilt on the floor.

Table 4.9 further indicates that 241 (67.3%) of the students, 27 (67.5%) of the Deputy Principals and 29 (70.7%) of the Principals indicated that there were no proper firefighting equipment in the laboratories. The researcher observed that fifteen schools had fire extinguishers that were not functioning properly since they had not been serviced as required while four schools did not have fire extinguishers. However, twenty-five schools had proper and functioning firefighting equipment in the laboratories.

Regarding training of the laboratory assistants, majority of the respondents, that is 286 (79.9%) of the students, 30 (75.0%) of the Deputy Principals and 31 (75.6%) of the Principals strongly agreed that laboratory technicians were qualified to handle students in the science laboratories.

On the school libraries, most respondents, that is, 245 (68.3%) of the students, 26 (65.5%) Deputy Principals and 27 (65.8%) of the Principals disagreed to the fact that school libraries were large enough to accommodate students at any given time. The observation by the researcher confirmed that twenty-five of the schools had no libraries and four had small libraries that were more of book stores. At the same time, furniture available in the libraries was not safe for use by learners in five schools since some stools were too high compared with the tables where students were writing from. This was unsafe for students who had to bend in order to use these tables.

In stating their level of agreement that libraries were well ventilated, 205 (57.2%) of the students and 25 (62.5%) of the Deputy Principals disagreed while 28 (68.3%) of the Principals disagreed. They indicated that libraries had narrow windows which

did not allow proper air circulation. According to 281 (78.5%) of the students, 28(70.0%) of the Deputy Principals and 28 (68.3%) of the Principals, libraries were not well equipped with relevant learning materials. This was in agreement with sentiments of one of the CQASO who during the interview stated that “libraries in some schools within my area are stocked with old books mostly donated by well-wishers even though such books are not relevant to the users.”

The findings of the study concerning safety of school laboratories confirmed that most schools had not adhered to the safety policy. The researcher observed overcrowding during practical lessons, the chemicals were poorly stored and firefighting facilities were not proper. The students did not have protective clothing and this posed danger especially if some chemicals accidentally spilt on them. These findings are in agreement with Uy (2011) who observes that many students work with a single fume hood in the laboratories rendering such equipment largely useless. Kandel, Neupane and Giri (2017), too, observe that hazardous chemicals, glassware, and equipment in the labs may pose dangerous environment to students and instructors in absence of proper safety measures. In addition, Mgadla (2006) found out that most schools had a negligible number of fire extinguishers and therefore this compromised students’ safety. According to Bruening, Hoover, and Radhakrishna (as cited in Golden, 2013), of all the jobs that a science teacher performs, safety of students is the most important. The schools, therefore, should ensure that their laboratories accommodate learners comfortably, have proper equipment and that those supervising students in the laboratories are trained and observe rules and regulations.

Like laboratories, libraries should have enough room for learners to read comfortably. A squeezed library cannot provide the privacy that the learner requires. The findings of this study indicate that many libraries were too small to accommodate learners at one given time, were located near the classes or next to the playground, were poorly ventilated and were not equipped with relevant learning materials. According to Church (2002), a school library should maintain excellent book stocks to stimulate reading culture among young people provide access to up-to-date technology and provide services aimed at meeting the particular needs of a particular group. In addition, the findings of the present study disagree with those of Clark (2002) who noted that libraries should respond to the needs of the learners. Ideally, a library needs to be comfortable, safe, and quiet with a welcoming environment that would offer more private reading opportunities (MOE, 2008). According to Kristin, Henrich, Richard and Stoddart(2016), a well-designed library enhances the overall security and safety of the library building and its users.

Similarly, Wexelbaum (2017) note that libraries should revisit their policies and procedures as well as assess their physical needs. However, modern library emergency plans focus more on the protection of resources, and the valuation of lost resources, than they do people (Alliance Library System, n.d.; Graham, 2013; Halsted, Clifton, & Wilson, 2014).

4.3.5 Safety Status of School Toilets and Play Grounds in Public Secondary Schools in Nairobi and Nyeri Counties

The information collected on safety of school toilets and play grounds is presented in Table 4.10.

Table 4.10: Students', Deputy Principals' and Principals' Responses on School Toilets and Play Grounds Safety

Statements	Students (n=358)						Deputy Principals (n=40)						Principals (n=41)					
	A		NS		D		A		NS		D		A		NS		D	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1 Adequate toilets for students(1:7)	74	20.6	34	9.5	250	69.9	11	17.5	-	-	29	72.5	5	52.5	2	4.9	34	83.0
2 Clearly designated Toilets for girls and boys	155	43.3	41	11.5	162	45.2	19	47.5	-	-	21	52.5	20	48.7	1	2.4	20	48.7
3 Clean and well maintained	91	25.5	19	5.3	248	69.2	11	27.5	3	7.5	26	65.0	15	36.6	1	2.4	25	61
4 Large , Adequate for all sports	209	58.4	30	8.4	119	33.3	27	67.5	4	10.0	9	22.5	25	61.0	3	7.3	13	31.7
5 Leveled Playgrounds	105	29.9	34	9.5	219	61.2	12	30.0	4	10.0	24	60.0	15	36.6	3	7.3	23	56.1
6 Trimmed playgrounds	277	77.3	29	8.1	52	14.5	26	65.0	5	12.5	9	22.5	29	70.3	5	12.2	7	17.1
7 Safe Playgrounds	259	72.3	42	11.7	57	15.9	24	60.0	8	20.0	8	20	26	63.4	5	12.2	10	24.4
8 Secure and well-guarded school gate	282	78.7	29	8.1	47	13.1	27	67.5	3	7.5	10	25.0	33	80.5	-	-	8	19.5
9 Perimeter Fence around the School	223	62.3	34	9.5	101	28.2	18	45.0	7	17.5	15	37.5	25	61.0	-	-	16	39.1

LEGEND

A- Agree

NS-Not sure

D-Disagree

As indicated on Table 4.10, 250(69.9%) of the students disagreed while 29 (72.5%) of the Deputy Principals and 34 (83.0%) of the Principals strongly disagreed to the statement that toilets in the school were adequate since more than seven students crowded in front of one toilet during break time. This view was supported by one CQASO who commented that most schools especially girls' schools, had very few toilets such that the learners had to queue during break time.

The researcher observed that the school toilets were not only few in comparison with the student population (the recommended ratio is 1:7) but were also positioned near the entrance or near the administration block. This discouraged the students from visiting the toilets during break time and instead encouraged them to ask for permission to use the toilets during class time. This observation was supported by one CQASO who mentioned that:

Some schools have very poor planning especially concerning the construction of toilets. Some are just outside the administration block. This not only makes it awkward to the user but also emits a bad smell to those in buildings and surroundings. This could compromise both privacy and safety of learners.

Table 4.10 further indicates that, 162 (45.2%) of the students, 21 (52.5%) of the Deputy Principals and 20 (48.8%) of the Principals disagreed to the statement that there were clearly designated toilets for girls and boys. The study also established that, 248 (69.25 %) of the students, 26 (65.0%) of the Deputy Principals and 25(61.8%) of the Principals disagreed that toilets were clean and well maintained.

These responses were in line with the observation made by the researcher in nine of the forty four sampled schools which had four overflowing toilets caused by blockage. In addition, there were two broken sinks and damaged taps. In five schools, water points were not well distributed within the schools' compounds to enable students to clean their hands after visiting the toilets.

As indicated in Table 4.10, 209 (58.4%) of the students, 27(67.5%) of the Deputy Principals and 25(61.0%) of the Principals agreed that schools had large playgrounds for all sports and games. However, 219 (61.2%) of the students disagreed while 24 (60.0%) of the Deputy Principals and 23 (56.1%) of the Principals disagreed that playgrounds were well leveled. The observation confirmed that in seven schools, the playground was sloppy and could be dangerous to the users.

On the issue of whether the grass was trimmed and kept short in the school compound, 277(77.3%) of the students, 26 (65.0%) of the Deputy Principals and 29 (70.3%) of the Principals agreed that grass in the playgrounds was kept short. In addition, many of the respondents, that is, 259(72.2%) of the students, 24(60.0%) of the Deputy Principals and 26 (63.4%) of the Principals agreed that playgrounds were safe and free of dangerous items. The observation confirmed that majority of the schools had well-managed playgrounds.

Concerning security of the sampled schools, 282(78.7%) of the students, 27 (67.5%) of the Deputy Principals and 33 (80.5%) of the Principals agreed that there were secure and well-guarded gates that provided security to school community. In reference to perimeter fence, 223 (62.3%) of students, 18 (45.0%) of the Deputy

Principals and 25(61.0%) of the Principals agreed that there was a perimeter fence around the school. According to observations made only three schools, had improper gates while in five schools, gates existed but the fence was either lacking or incomplete.

Figure 4.12 illustrates a poorly constructed gate that can hardly ensure safety in a school. In contrast, Figure 4.13 illustrates a well-constructed gate with a security office. The presence of well secured gate implies that no intruder enters a school without being noticed by the gateman from the security office. Figure 4.14 illustrates inappropriately constructed pit latrines between classrooms that may emit bad smell as well as discourage students from using them.



Figure 4.12: An Example of a Poorly Constructed and Insecure School Gate



Figure 4.13: An Example of a Properly Fitted and Lockable Gate with a Security Officer



Figure 4.14: An Example of Inappropriately Constructed Pit Latrines between Classrooms and Administration Block

Figure 4.15 illustrates a well leveled playground that can ensure safety of the users while Figure4.16 shows a poorly leveled playground that is dangerous to use.



Figure 4.15: An Example of a Well Leveled Playground



Figure 4.16: An Example of a Poorly Leveled Playground

Figure 4.17 shows a live fence that has probably been used by some students to escape from school since there is an opening to the area outside the school. Figure 4.18 illustrates a well maintained live fence which is secure.



Figure 4.17: An Example of an Insecure Live Fence



Figure 4.18: An Example of a Secure Live Fence

The findings concerning safety of school toilets concur with the views expressed by Siringi (2001) that pupil to toilet ratio was grossly ignored by majority of schools despite the fact that provision of sanitation facilities has implications on health of the learners. This scenario of many students using few toilets could be attributed to the high enrolment in secondary schools after the introduction of free secondary education in 2003. Schools, however, should provide adequate toilets to avoid outbreak of waterborne diseases. These findings support Glickman's (2004) view that significant amount of disease could be prevented through better access to safe water supply, adequate sanitation facilities and better hygiene practices.

The findings on safety of playground are supported by the views expressed by Glickman (2004) that schools should ensure a safe school playground environment. To achieve this, schools should ensure that grounds are leveled where learners play in child-friendly outdoor environments. The playgrounds should be learner friendly to enhance excellence in acquisition of physical (or motor) and psychosocial skills (MOE, 2008).

In addition to safety of the playground, the entire safety of the school ground is paramount. This could be ensured if the school had proper fencing and a well-guarded gate by a trained security officer. The findings of the study are in line with Omolo and Simatwa's (2010) view that gates are supposed to control access, keep intruders out and prevent learners from leaving school during school hours. In addition, if there is a perimeter fence, there should be at least one access point. According to Delidou, Matsouka and Nikolaidis (2015), an encouraging school environment can motivate learners to be more physically active and therefore healthier. Chancellor (2013) notes that providing playgrounds to learners with a wide range of possibilities through provision of high quality learning.

4.4 Safety Status of School Social Environment in Public Secondary Schools in Nairobi and Nyeri Counties

The second objective sought to assess the status of school social environment safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties. To realize this objective, the study was guided by the following research question:

What is the safety status of school social environment in public secondary schools in Nairobi and Nyeri Counties?

The study sought information on schools' social environment safety which is crucial for proper teaching and learning in schools. The information was in regard to, alcohol, drugs and substance abuse, child abuse and safety of children with special needs.

4.4.1 Alcohol, Drugs and Substance Safety in Public Secondary Schools in Nairobi and Nyeri Counties

Information gathered on alcohol, drug and substance abuse in regard to school safety is presented in Table 4.11.

Table 4.11: Students', Deputy Principals' and Principals' Responses on Alcohol, Drug and Substance Safety in Public Secondary Schools in Nairobi and Nyeri Counties

Statements	Students (n=358)							Deputy Principals (n=40)						Principals (n=41)					
	A		NS		D		A		NS		D		A		NS		D		
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	
1 Students are enlightened about ADA during teaching	315	88.0	20	5.6	23	6.4	32	80.0	4	10.0	4	10.0	39	95.1	1	2.4	1	2.4	
2 Official ADA fighting agencies such as NACADA are invited to talk to students	194	55.0	29	8.1	132	36.8	23	7.5	10	25.0	7	17.5	31	75.6	2	4.9	8	19.5	
3 Learners discuss on how to create a drug free school environment	277	77.3	8	2.2	123	34.4	29	72.5	4	10.0	7	17.5	28	68.3	--		13	31.7	
4 Students properly display magazines and newspaper articles on ADA	42	11.7	14	3.9	292	44.3	8	20.0	2	5.0	30	70.0	20	48.7	-		21	51.2	
5 There are forums for students to share ADA cases in their neighborhood	231	64.4	2	0.5	125	34.9	25	62.5	7	17.5	8	20.0	20	48.8	3	7.3	18	43.9	
6 Students are educated on how to resist negative peer pressure	311	86.9	25	7.0	22	6.2	31	77.5	4	10.0	5	12.5	37	90.3	-		4	9.8	
7 Parents are involved in the fight against ADA	198	55.3	76	21.2	84	23.5	25	62.5	5	12.5	10	22.5	27	65.8	6	14.6	8	19.5	
8 There are no shops around schools from where students can access ADA	29	8.0	4	1.1	325	90.8	6	22.5	2	5.0	32	90.0	6	14.6	2	4.9	33	80.3	
9 The school cooperates with law enforcers and other community members to fight ADA	214	59.8	93	26.0	51	14.2	33	80.5	4	10.0	3	7.5	40	97.5	-		1	2.4	
10 There are guidance and counseling services to deal with ADA cases	201	84.0	29	8.1	28	7.8	35	87.5	3	7.5	2	5.0	32	78	6	14.6	3	7.3	
11 Students are given adequate pastoral care to deter them from ADA	247	69.0	56	5.6	55	15.3	35	82.5	4	10.0	3	7.5	36	87.8	2	4.9	3	7.3	
12 There are rehabilitation programmes in place for students with ADA problems	62	17.3	19	5.3	277	77.4	4	10.0	1	2.5	35	87.5	6	14.6	2	4.9	33	80.4	

LEGEND

A- Agree NS-Not sure D-Disagree

According to Table 4.11, 315 (88.0%) of the students, 32(80.0%) of the Deputy Principals and 39(95.1%) of the Principals, agreed that students were enlightened about Alcohol, Drug and Substance Abuse (ADA) during teaching. It is notable that 194(55.0%) of the students, 23(57.5%) of the Deputy Principals and 31(75.6%) of the Principals agreed that alcohol, drug and substance abuse fighting agencies such as NACADA were invited to talk to students. A large number of respondents, that is, 277(77.3%) of the students, 29(72.5%) of the Deputy Principals and 28(68.3%) of the Principals agreed that learners discussed and suggested ways that could contribute to creating a drug free school environment. The responses on whether learners displayed magazines and newspapers on articles on ADA, 292(44.3%) of the students, 30(70.0%) of the Deputy Principals and 21(51.2%) of the Principals disagreed with the statement. Table 4.9 further indicates that, 231 (64.4%) of the students, 25 (62.5%) of the Deputy Principals and 20 (48.8%) of the Principals agreed that there were forums for students to narrate their experiences of what they saw in their neighborhood related to ADA.

Many respondents, that is, 311 (86.9%) of the students, 31 (77.5%) of the Deputy Principals and 37 (90.3%) of the Principals agreed that students were educated on how to resist negative peer pressure. More than fifty percent of the respondents, that is, 198 (55.3%) of the students, 25 (62.5%) of the Deputy Principals and 27 (65.8%) of the Principals stated that parents were involved in the fight against ADA. However, majority of the respondents, that is, 325 (90.8%) of the students, 32 (90.0%) of the Deputy Principals and 33(80.3%) of the Principals disagreed that there were no shops around schools from where students could access alcohol and drugs. The researcher observed that eight schools from both counties selected for the

study were situated near the shopping centre where students were likely to access drugs.

Table 4.11 further indicates that, many respondents, that is, 214 (59.8%) students, 33 (80.5%) Deputy Principals and 40 (97.5%) Principals indicated that schools were cooperating with law enforcers and other community members to fight ADA. Almost half of all respondents, that is, 268 (49.7%) agreed that there were guidance and counseling services in schools to deal with ADA cases.

In response to whether pastoral care was given to students 247, (69.0%) of the students, 35 (82.5%) of the Deputy Principals and 36 (87.8%) of the Principals agreed that students were given adequate pastoral care to deter them from engaging in harmful practices. However, more than half of all respondents, that is, 345 (64.0%) disagreed that there were rehabilitation programmes in place for students with ADA problems.

The findings of the study on ADA indicate that schools had complied with most of the safety guidelines since students were enlightened about Alcohol, drug and Substance Abuse during teaching, schools were cooperating with law enforcers and other community members to fight ADA, learners discussed and suggested ways that could contribute to creating a drug free school environment, that there were forums for students to narrate their experiences of what they saw in their neighborhood related to ADA and that parents were involved in the fight against ADA. These findings could imply that messages about alcohol, drugs and substance abuse had been well blended in the curriculum to have an impact on students and

suggest that there was adequate involvement of stakeholders in the fight against alcohol, drugs and substance abuse.

The respondents' general views implied that Alcohol, Drugs and Substance Abuse could be eliminated in their schools. This could be done by developing and enforcing national policies on ADA, involving all stakeholders in the fight against ADA, and aggressively campaigning against ADA through all forms of media and role modeling to the youth among others. These findings are in agreement with those of Masita's (2004) that elimination of drug and substance abuse in schools call for concerted effort from all stakeholders. In addition, the findings are in agreement with Gatua's (2013) that in order to create a drug free school environment, there should be forum for learners to narrate their experiences of what they saw in their neighborhood related to ADA. The general view from the findings is that most school had minimized ADA. This implies that if all stakeholders agreed to work together ADA menace could be put to an end.

4.4.2 Safety from Child Abuse in Public Secondary Schools in Nairobi and Nyeri Counties

Information gathered on child abuse in public secondary schools in Nairobi and Nyeri counties is presented on Table 4.12.

Table 4.12: Students, Deputy Principals and Principals' Responses on Issues of Child Abuse

Statements	Students (n=358)						Deputy Principals (n=40)						Principals (n=41)					
	A		NS		D		A		NS		D		A		NS		D	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1 Teachers are able to identify abused children	139	38.8	-		219	61.1	11	17.5	2	5.0	27	67.5	7	17.1	1	2.4	33	80.5
2 Child abuse cases are reported to relevant authorities	46	12.9	39	10.8	273	76.2	11	27.5	5	12.5	25	60.0	10	24.4	-		31	75.6
3 Students are enlightened on how to identify a person with wrong intention	194	54.2	66	18.4	98	27.4	27	47.5	8	20.0	5	12.5	31	75.6	3	7.3	7	17.0
4 Students are encouraged to report cases of abuse on them.	288	80.5	26	7.3	44	12.3	35	87.5	2	5.0	3	7.5	38	92.7	-		3	7.3
5 Students are discouraged from accepting any inducement	283	79.0	34	9.5	41	11.5	35	87.5	3	7.5	2	5.0	37	90.2	1	2.4	3	7.3
6 Parents are sensitized on issues regarding child abuse	199	56.1	100	28	59	16.5	29	72.5	8	20.0	3	7.5	30	73.2	7	7.1	4	9.8
7 Students who pass through secluded places are encouraged to walk in groups	224	62.6	53	14.8	81	22.6	30	75.0	5	12.5	5	12.5	35	85.3	4	9.8	2	4.8
8 Students are advised to scream or otherwise if they find themselves in a danger.	229	64.0	52	14.5	77	21.5	33	82.5	3	7.5	4	10.0	35	85.4	3	7.3	3	7.3
9 Students are advised not to give strangers any information regarding them or their families	262	73.2	36	10.1	60	16.7	26	65.0	11	27.5	3	7.5	31	75.6	3	7.3	6	14.6
10 There are guidance and counselling programmes for abused children	189	52.8	81	22.6	88	24.6	32	80.0	4	10.0	4	10.0	31	75.6	3	7.3	7	17.1
11 There are strategies in place to rescue children from different forms of abuse	49	13.7	44	12.2	265	74.1	7	17.5	1	2.5	32	80.0	6	14.6	1	2.4	34	82.9
12 Teachers organize remedial classes for children suffering different forms of abuse	69	19.3	15	4.1	274	76.5	5	12.5	4	10.0	32	80.0	5	12.2	1	2.4	35	85.3

LEGENDA- Agree

NS-Not sure

D-Disagree

According to Table 4.12, More than half of all respondents, that is, 219 (61.1%) of the students, 27 (67.5%) of the Deputy Principals and 33(80.5%) of the Principals the students disagreed to the statement that teachers were able to identify children who had been subjected to child abuse. Many of the respondents, that is, 273 (76.2%) of the students, 25 (60.0%), of the Deputy Principals and 31 (75.6%) of the Principals disagreed that child abuse cases were reported to relevant authorities such as police and children's department. This was a major concern given that schools had created a lot of awareness on dealing with cases of child abuse. From Table 4.10, 194(54.2%) of the students, 27(47.5%), of the Deputy Principals and 31 (75.6%) of the Principals stated that they were enlightened on how to identify a person with wrong intention while 288 (80.5%) of the students, 35 (87.5%), of the Deputy Principals and 38 (92.7%) of the Principals agreed to the statement that students were encouraged to report cases of child abuse.

Table 4.12 further indicates that, 283 (79.0%) of the students, 35 (87.5%), of the Deputy Principals and 37 (90.2%) of the Principals agreed that students were discouraged from accepting any form of inducement from strangers. It is also clear that majority of all respondents, that is, 258(57.4%) agreed to the statement that parents were sensitized on issues regarding child abuse. A large number of all respondents that is, 309 (68.8%) agreed that students who passed through secluded places were encouraged to walk in groups while 297 (66.1%) of all respondents stated that students were advised to scream if they found themselves in a dangerous situations. According to 319 (71.0%) of all respondents, students were advised not to give strangers any information regarding them or their families while 252(56.1.

%) of the respondents stated that there were guidance and counselling programmes for children who had undergone forms of child abuse.

Reluctance to report child abuse cases to the police or relevant bodies by the sampled schools were echoed by one CQASO who mentioned amid regrets that:

These are cases that nobody wants to report because if they are reported or if a child reports, the teacher is interdicted. Instead the students are counseled or given a safe ground elsewhere. Bullying may be present especially among form ones but is rarely reported.

As shown in Table 4.12, 265 (74.1%) of the students, 32 (80.0%) of the Deputy Principals and 34(82.9%) of the Principals disagreed that there were strategies in place to rescue children from different forms of child abuse. Similarly, some respondents, that is, 274 (76.5%) of the students, 32(80.0%) of the Deputy Principals and 35 (85.3%) of the Principals disagreed that teachers organized remedial classes for children suffering different forms of abuse.

The findings of the study indicate that child abuse cases in schools were minimal but there were still some issues that had not been addressed properly. This is because the findings on whether teachers were able to identify children who had been subjected to child abuse or whether they organized remedial classes for children suffering different forms of abuse indicate that the sampled schools had not adhered to the safety policy guidelines. This could be due to the fact that teachers were handling large classes and had high work load which denied them time for individualized attention to learners. Similarly, there could have been no training specifically focusing on how teachers could identify cases of child abuse. Hackett and Hortman (2008) assert that teachers trained on matters related to handling children can make a

difference to both the effectiveness and efficiency of schooling. It was, however, unfortunate that child abuse cases were not reported to relevant authorities such as police and children's department. This was a major concern given that schools had created a lot of awareness on dealing with cases of child abuse both within and outside school. This lack of proper interventions for abused children could have negative influences on the teaching and learning of such children. According to Brooks (2017), it is important to develop positive teacher - student relationship in school so that the students are mentored well on what decision to make. This is because child abuse in schools manifests in a wide range of aggressive acts from name calling to physical assault and sexual abuse (Kemunto, Rolee & Balyage, 2015). Lussier and FitzPatrick (2016) note that increasing students feelings of safety at school improves the overall school and neighbourhood safety climate is likely to promote classroom engagement and high school completion and decrease mental problems of the youth. Ahmad and Khan (2013) also note that corporal punishment significantly negatively correlated with students' motivation and classroom learning.

4.4.3 Safety of Children with Special Needs in Public Secondary Schools in Nairobi and Nyeri Counties

The study also sought to establish the extent to which the standard has been undertaken in reference to safety of children with special needs. The information gathered on safety of children with special needs on Table 4.13.

Table 4.13: Students', Deputy Principals 'and Principals' responses on Safety of Children with Special Needs

Statements	Students (n=358)						Deputy Principals (n=40)						Principals (n=41)					
	A n	%	NS n	%	D n	%	A n	%	NS n	%	D n	%	A n	%	NS n	%	D n	%
1 Presence of access paths for children with special needs	55	15.3	8	2.2	295	82.3	5	12.5	1	2.5	34	85.0	9	22.0	1	2.4	32	78.1
2 Ramps within story buildings for children with special	95	26.5	20	5.5	243	67.8	12	30.0	1	2.5	27	67.5	9	22.0	3	7.3	29	70.7
3 Responsive Teaching and learning environment for children with special needs	71	19.8	21	5.9	266	74.3	11	27.5	5	12.5	25	62.5	11	26.8	1	2.4	29	70.7
4 Parents and community are sensitized to take children with special needs to school	80	22.4	27	7.5	251	70.1	9	22.5	5	12.5	26	65.0	5	12.2	8	9.5	28	68.2
5 Strategies for early identification of children with special needs	75	20.9	4	1.11	279	77.9	4	10	-	-	36	90.0	9	22.0	-	-	32	78.0
6 Guidance and counseling programmes for children with special needs	250	69.8	3	0.8	105	29.3	29	72.5	-	-	11	27.5	26	63.4	2	4.9	13	31.7
7 Trained Teachers for children with special needs	71	19.8	21	5.9	266	74.3	8	20.0	-	-	32	80.0	7	17.1	2	4.9	32	78.0
8 No bullying of children with special needs	258	72.0	49	13.6	51	14.3	31	77.5	4	10.0	5	12.5	37	90.1	-	-	4	9.8

LEGEND

A- Agree

NS-Not sure

D-Disagree

According to Table 4.13, 295 (82.3%) of the students, 34(85.0%) of the Deputy Principals and 32(78.1%) of the Principals indicated that there were no access paths provided for children with special needs. Similarly, 243 (67.8%) of the students, 27(67.5%) of the Deputy Principals and 29(70.7%) of the Principal indicated that there were no ramps to enable children with special needs access facilities within storied buildings. Table 4.12 also indicates that 266 (74.3%) of the students and 25 (62.5%) of the Deputy Principals disagreed while 29 (70.7%) of the Principals disagreed that teaching and learning environment was responsive to the needs of children with special needs. According to 251 (70.1%) of the students, 26 (65.0%) of the Deputy Principals and 28 (68.2%) of the Principals, parents and community had not been sensitized adequately to take children with special needs to schools.

According to Table 4.13, 279 (77.9%), of the students, 36(90.0%) of the Deputy Principals and 32 (78.0%) of the Principals disagreed that there were strategies for early identification of children with special needs. However, 250 (69.8%) of the students, 29 (72.5.0%) of the Deputy Principals and 26(63.4%) of the Principals agreed that there were guidance and counseling programmes in place for children with special needs. Majority of the respondents, that is, 266 (74.3%) of the students, 32 (80.0%) of the Deputy Principals and 32(78.0%) of the Principals indicated that teachers were not well trained to cater for children with special needs. According to table 4.13 there was a feeling by slightly less than half of all respondents, that is, 326 (72.6%) that there was no bullying of children with special needs in the schools under study.

The findings of the study concerning safety of children with special needs indicate that there was a lot that needed to be done by schools if children with special needs are to feel and be safe in schools. This is because many of the schools had no ramps to enable children with special needs access facilities within storied buildings and parents and community had not been sensitized adequately to take children with special needs to schools. Similarly, the findings indicate that no strategies for early identification of children with special needs had been put in place nor were teachers trained to cater for such children. This led to many parents keeping their challenged children at home due to disabilities, stigmatization, or because they were considered too costly to maintain and were of no economic value to the home as compared to the normal children (Leonard &Cheshire, 2013). These cases point to lack of adequate funds, and lack of a clear policy framework indicating treatment of children with special needs.

The findings, however, indicate that there was no bullying of children with special needs. This could have positive contribution to safe and secure teaching and learning environment for children with special needs to enable them realize full participation in social life and development. The findings of the present study are in agreement with Payton et al(2008) report on the Collaborative for Academic, Social and Emotional Learning which noted that learning environments that focus on caring student-teacher relationships, students' social and emotional needs, and high expectations result in students who perform better academically; are more likely to attend school; and have significantly lower rates of emotional distress, violence, delinquency, substance abuse, and sexual activity. In addition to improving students' academic performance, supportive schools that deal with children with special needs

help prevent a host of negative consequences, including isolation, violent behaviour, dropping out of school, and suicide.

4.5 Influence of School Physical Infrastructure Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties

The third objective sought to establish the influence of school physical infrastructure safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri counties. To realize this objective, the study was guided by the following research question.

What is the influence of school physical infrastructure safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri Counties, Kenya?

To gather this information, the researcher used open ended questions in the questionnaires and interview guide as well as incorporated the observations made. For the purpose of analysis, the responses from open ended questions were given codes with the aim of quantifying those (quantitative data). However, the information from interview guide was analysed qualitatively and presented using narratives and voiced verbatim. Qualitative data complemented the quantitative data.

The main themes on the influence of physical infrastructure safety on teaching and learning process were mainly on location of the facility, lighting and ventilation, space, condition of the furniture and the roof as well as cleanliness of the facility on Classrooms, dormitories, dining halls, kitchens, laboratories, libraries, toilets and play grounds were as discussed.

4.5.1 Influence of Classroom Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties

Regarding the influence of safe classrooms on teaching and learning processes, a group of students from one of the sampled school stated that, classrooms were located near roads and pathways and this affected teaching and learning process.

This response was supported by the deputy principal who had this to say:

There is too much noise from the vehicles, motorbikes and pedestrians. This noise disrupts learning. The teacher sometimes has to wait for the noise to subside before continuing with his teaching and this takes a lot of teaching and learning time.

Other responses indicated that some schools were located near the shopping centers.

Due to this proximity, some individuals sold forbidden substances, such as cigarettes, drugs and alcohol. This view was supported by a principal of one of the sampled schools who stated that:

Our school forbids students from indulging in substances such as cigarettes, tobacco, drugs and beer. However, since the school is located near the shops, some shopkeepers target students as customers. Moreover, during the weekend, religious groups or crusades hold their worship at the shopping centers and this disrupts learning preparations and activities.

In reference to classroom lighting, a group of respondents indicated that poorly lit classrooms influenced teaching and learning processes. In one of the sampled schools, the students had this to say concerning the classroom lighting:

Our classrooms are poorly lit. Sometimes, the lighting from the bulbs is so dim that we have to struggle to read. Other times, we feel pain in our eyes due to too long straining while doing our homework. Many a time, during preparation time, we crowd at one place where there is lighting.

Another concern that was cited as influencing teaching and learning was congestion in the classrooms. In boarding schools, some respondents indicated that:

Our classrooms are too congested. There are three students per desk and the arrangement of desks during group work is not conducive for learning. We are unable to form a group of three students. The teacher also finds it impossible to reach all members in the various groups. The classroom furniture is metallic and makes a lot of noise. Due to this congestion, those who sit at the front suffer from chalk dust since their seats are just below the chalkboard.

These sentiments are in agreement with Glick, Randrianarisoa and Sahn's (2011) findings that classroom infrastructure affects students' learning as well as test scores at both the elementary and secondary school levels. Jared and Asghar (2017) also note that there is a positive significant association between classroom environment and academic achievement among girls in secondary schools. However, Glewwe, Kremer, Moulin and Zitzewitz (2004) found that blackboards and / or flip charts have little or no influence on student's learning.

The researcher observed that some classrooms had as many as 60 students though they were designed to accommodate 40 students. This made it difficult for students and teachers to move freely within the classroom. This view was explained by the County Quality Assurance and Standards Officer during the interview when she said this:

There are some schools where classrooms of 7.5m x 5.85m which should accommodate a maximum of 30 learners in one-seater desk or 40 learners in two seater desks in line with the provisions of the Ministry of Education guidelines are accommodating as many as 60 learners in one seater desk. These classrooms are overcrowded and the desks are haphazardly placed. This hampers easy and orderly

movement of learners and teachers as well as compromises the safety of the users.

Poor ventilation was another factor cited as having an influence on teaching and learning process. In one of the sampled schools, the Deputy Principal indicated that there were some classes where windows could not open because they were permanently fixed with wires. Similarly, the students in the same school noted that “ventilation in our classrooms interferes with our learning since the windows are very small and we doze off in the afternoon. It is very difficult to concentrate in the classroom.”

The researcher noted that in five classrooms in the sampled schools, there were tiny windows that did not allow enough air circulation, while four windows in one school were permanently fixed with wires and therefore could not open. Since the classes were congested it was uncomfortable for the learners and the teacher to engage in meaningful activity, especially in the afternoon. However, the researcher noted that classrooms with open windows provided good ventilation, and that, learners were attentive during the lessons.

The findings concerning classroom ventilation indicated that poor ventilation in some classrooms led to some learners dozing off especially in the afternoon while others failed to attend to afternoon lessons. This influenced their performance negatively. This can be attributed to the fact that there was poor air circulation especially since these classrooms were congested. The general view of the respondents was that classroom safety greatly influences teaching and learning processes. These findings are supported by Haverinen-Shaughnessy and

Shaughnessy (2011) who found that there is a statistically significant association between ventilation rates and mathematics scores. Haverinen-Shaughnessy and Shaughnessy noted that the scores were stronger for the students from classrooms with high ventilation rates. Similarly, safe classrooms enhance teaching and learning processes which leads to an improvement in academic achievement (Pouget, 2010; Han, 2013; Mansori, Vaz & Ismail, 2014; Ali, Kim & Ryu, 2016). Salleh, Kamaruzzaman and Sulaiman (2011) also note that there is a significant influence from indoor environmental quality which influences student attendance and performance. The findings of the present study also concur with the view that poor building facilities and high student mobility affect student performance levels and academic achievements while negative feelings (mood) can come from tasks that are being worked on while positive feelings come from the environment, especially open environments (Evans et al., 2010; Stone, 2001).

4.5.2 Influence of Dormitory Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties

The general views of the respondents regarding the influence of safe dormitory on teaching and learning processes touched on cleanliness, state of the floor and the roofs, congestion, and supervision. Many of the respondents said that regular inspections of their dormitories ensured high hygiene status and less frequent cases of illnesses caused by unhygienic surroundings. This ensured that many students remained in class. Furthermore, due to the frequent inspection, cleanliness in the dormitories was done on time and this enabled learners to attend lessons on time without interrupting the teaching and learning processes. In one of the sampled

schools, the Deputy Principal had this to say concerning frequent supervision of the dormitory:

In our school, cleanliness inspection has been time-tabled. The boarding mistress makes sure that inspection is done daily and on time. In this way, learning time is not interrupted; hence, there are very few cases of illnesses caused by dirt from the dormitories.

The Deputy Principal, however, explained that congestion in the dormitories was not only a health hazard but also interfered with time management. Most of the dormitories had few bathrooms and this led to many learners getting late to class as they had to queue for long, in the morning, in order to take a bath.

In another school, a group of students explained that congestion in the dormitories led to poor air circulation that made them uncomfortable at night. They stated that due to congestion, their dormitories were dirty and they produced nauseating smell. Consequently, most of these students indicated that they failed to sleep well and could not concentrate in class the following day. Poorly constructed and maintained dormitories in the sampled school had some negative influence on teaching and learning.

One of the CQASOs stated during the interview that some dormitory floors were too slippery and that there were times when students had fallen and broken their arms when cleaning. This meant that the affected students had to stay away from class. The officer further commented that, “in some schools, some dormitory roofs leak during the rainy season. Students assigned to such dormitories do not concentrate in class when it starts raining as they keep on asking for permission to reposition their beds”. The findings of the study are in line with Gatua’s (2013) findings that the state of the dormitories influences the learner’s behaviour in school and this could

consequently influence learners' academic performance. These findings are, however, in contrast with the findings of a study carried out by Zhao and Glewwe (2010) which examined the impact of the condition of roofs, walls and floors on time in school, but found no significant impact.

4.5.3 Influence of Dining hall and kitchen Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties

The following themes emerged from responses concerning influence of dining hall and kitchen safety on teaching and learning processes: Size of the facility and staff; cleanliness and state of the floor; and methods of waste disposal. In regard to the size of the dining hall, respondents from three schools indicated that their dining halls were small and the kitchen personnel were few. This meant that students spent a lot of time taking their meals. This in turn caused delay in attending preps for the students cleaning the dining hall after meals as they spent most of their prep time cleaning the dining hall. The researcher, while collecting data, observed in one school very few cooks serving very many students such that the time allocated for lunch was over before some students took their lunch.

Responses from another sampled school indicated that, methods of disposing off leftovers from the dining hall and the kitchen in their school was poor and posed a health hazard. The open channel that disposed off the dirty water exposed students to the dangers of waterborne diseases. The findings of the study support Lloyd, Tawila, Wesley, Clark, and Mensch's (2003) observation that proper condition of school infrastructure such as the dining halls and the kitchens increases students' time in school.

4.5.4 Influence of Laboratory and Library Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties

In reference to the influence of Laboratory and library Safety on teaching and learning processes, four themes emerged from the respondents: space and lighting, method of waste disposal especially in the laboratory, ventilation and arrangement of the teaching – learning resources. In one of the sampled schools, it was the opinion of the respondents that the laboratory storerooms were small and poorly lit which hindered easy accessibility of chemicals and equipment by science teachers. This was made worse when the lab technician was absent as the teacher concerned took longer time to locate these items.

The researcher noted that most labs in the sampled schools lacked emergency doors and proper drainage of contaminated water. Used water and chemicals were disposed off manually by students before the commencement of the next lesson; thus, taking up their time for the next lesson.

Concerning safety of the library, a student indicated that their “libraries lacked space and had few chairs; hence, accommodated only few students at a time”. Lack of space had a negative influence on teaching and learning as many students did not see the point of visiting a crowded library. The poor ventilation in these libraries made the rooms dump, chilly and smelly which led to poor study habits as learners were reluctant to visit the facility.

The general response to library safety and its influence on teaching and learning process was that books in the libraries in the sampled schools were few, often dusty

which made the students cough, and not well arranged. This scenario led to a lot of the learners' study time being wasted as they tried to trace books.

The findings on the influences of school laboratory safety on teaching and learning in general indicate that the state of the laboratory in terms of space and lighting, method of waste disposal, ventilation and arrangement of the teaching – learning resources influenced teaching and learning processes in the sampled schools. These findings are in agreement with Konstantopoulos and Borman (2011), Zhao and Glewwe (2010) views that the availability of science laboratory facilities increased student learning and time in developed countries.

The findings on the influence of school library safety on teaching and learning are in agreement with Sprietsma (2012) findings that the state of a school library in terms of space available, books present and the proper conditions of the room increases students' learning. The findings of the present study are also in consonance with Wexelbaum's (2017) study which noted that most libraries are understaffed making the learning process difficult. These findings, however, are in contrast with Borkum, He and Linden (2013) results on the influences of school libraries on test scores that were found to be statistically insignificant. The findings, therefore, show that the safety status of the laboratory and library influences teaching and learning processes.

4.5.5 Influence of School toilets and Playground Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties

Regarding safety of school toilets, the availability and safety of the facility as well as influenced teaching and learning processes. A group of students in the sampled schools indicated that toilets were not adequate and this interfered with class time

since many students were not able to visit the toilets during break time. In ten schools, the researcher observed long queues of learners waiting to visit the toilets during break time. Some of these learners were not able to visit the toilets at that time and they would be seen running to the toilet a few minutes after the break while other students were in class. In another mixed school, students indicated that toilets for boys and girls were too close and this made the students (especially girls) not to visit the toilets during break time due to embarrassment. They instead asked for permission during the lesson as this would accord them privacy.

It was a general view by the sampled students that they were exposed to dangerous diseases when they had to clean the toilets without being provided with protective gloves. Due to the absence of protective clothing, those assigned duties in the toilets would fail to turn up for school the days when cleaning was being inspected. Other responses indicated that the sampled schools had very few water points for use by students after visiting the toilets. The researcher observed that in one of the sampled schools with one water point, students avoided queuing to wash their hands. This unhygienic state could lead to waterborne diseases.

Responses concerning playground safety and its influence on teaching and learning processes indicated that the state of the playground affected teaching and learning. According to one of the Quality Assurance Officers interviewed, “there had been cases of students’ injuries due to the playgrounds being unlevelled. Such injuries had kept the students away from attending classes.” The researcher observed that some of the sampled schools with bushy playgrounds discouraged students from participating in games and sports. According to one of the principals, “unsecured playgrounds without proper and secured gates in the sampled schools also

encouraged some students to sneak out of the school compound; hence, missing a lot of learning time.”

The influence of safety of school toilets on teaching and learning are supported by Glewwe et al. (2013) findings that examined the impact of sanitation facilities on educational outcomes, both test scores and time in school. Glewwe et al tracked students in the city of Puno in Peru and concluded that the availability of sanitation facilities led to increased reading comprehension.

Generally, the findings of the study concerning physical infrastructure indicate that the nature of the physical facility influenced teaching and learning processes either positively or negatively. In the sampled schools, lighting, ventilation, appropriateness of furniture, physical space, organisation of learning materials, cleanliness of the physical facility, provision of clean water and protective cleaning items, state of playground, methods of waste disposal as well as being gender sensitive while constructing toilets affected learners’ involvement in classroom activities and their performance. On the one hand, where these facilities were provided in good condition, teaching and learning process went on well. On the other hand, where these facilities were inadequate, teaching and learning was affected negatively. These findings are in agreement with Marshall’s (2009) suggestion that certain features of physical infrastructure facility such as space, lighting, noise, and desks in a school could cause discomfort and impair visual and cognitive performance and thus affect students’ learning outcomes. In addition, the findings of the present study are also in agreement with Nabaseruka (2010), Chancellor (2013) Delidou, Matsouka, Nikolaidis’ (2015) studies which noted that poor sanitation negatively affect students’ academic performance. The studies also

noted that students were more physically active during recess in adequately equipped schools.

4.6 Influence of School Social Environment Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties

The fourth objective sought to establish the influence of school social environment safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties. To realize this objective, the study was guided by the following research question.

What is the influence of school social environment safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri counties, Kenya?

The main issues of school social environment safety included safety against Alcohol, drug and substance abuse, safety from child abuse and safety of children with special needs. To gather this information, the researcher used open ended questions in the questionnaire and interview guide as well as incorporated the observations made. For the purpose of analysis, the responses from open ended questions were given codes with the aim of quantifying them (quantitative data). However, the information from interview guide and observations was analysed qualitatively and presented using narratives and voiced verbatim. Qualitative data complemented the quantitative data.

4.6.1 Safety against Alcohol, Drug and Substance Abuse and its Influence on Teaching and Learning Processes in Nairobi and Nyeri Counties

Responses from the sampled schools include themes such as absenteeism, psychological trauma and poor examination grades. In one of the sampled schools the deputy principal responded that;

Boys are mostly influenced by alcohol, drugs and substance abuse. This leads to truancy and the involved being sent away from school. It also leads to poor performance of examinations. There are some cases when students are affected psychologically and fail to do national examinations due to abuse of drugs.

These sentiments were echoed by one of the CQASO's who noted that "one of the serious influences of alcohol, drug and substance abuse in the schools is chronic absenteeism and poor grades for both internal and external examinations." These sentiments are in line with Masita's (2004) views that drug abuse contributes to loss of interest in academic work and indiscipline among students. In addition, the Collaborative for Academic, Social and Emotional Learning (2008) argues that students must be engaged and motivated to avoid them getting involved them engaging in drug use, violence, or sexual activity. Similarly, Cheloti and Gathumbi (2016) concluded that the use of school community was not effective in curbing drug and substance abuse in schools.

4.6.2 Safety against Child Abuse and its Influence on Teaching and Learning Processes

When asked to give their comments on how child abuse influenced teaching and learning processes in their schools, varied responses were given. While some responded that cases of child abuse were few in their schools and, therefore, did not have serious negative influence on teaching and learning processes, others stated that punishments given in their schools were not related to the offences done. For

example, one respondent commented that “collecting litter in the compound during class time because of failing to complete homework is not only unrelated, but also keeps the learners out of class, and this is regarded as child abuse.”

These responses were supported by one CQASO who stated that “some teachers use abusive language on learners who perform their subjects poorly.” This concurs with Leach, Machakanja and Mandoga’s (2002) observation that teachers have a habit of bullying learners who fail to measure up to their expectations. Similarly, Sango and Chiinze (2015) found out that child neglect which took the form of sending children out of class for failing to do homework denied them time to participate in class activities which resulted to low morale and self-esteem of these learners. This translated to poor grades and performance of exams.

Bullying was reported as a form of child abuse that influenced teaching and learning processes. In one of the sampled schools, a group of Form three students stated that “Form ones are molested by the Form twos. This takes the form of bullying and name calling. The affected learners often became withdrawn, lack self-confidence and do poorly in class.” The findings of the present study are in agreement with Brooks’ (2017) study which noted that bullying and sexual harassment and drug use in workplace safety affect learners’ participation in school. Therefore, it is important to develop positive teacher - student relationship during this time so that the students are mentored well on what decision to make. Similarly, according to Lussier and FitzPatrick (2016), increasing students’ feelings of safety at school, for example, reducing victimization, improving the overall school and neighbourhood safety climate is likely to promote classroom engagement and high school completion and decrease mental problems of the youth.

Another form of child abuse cited by the respondents and which influenced teaching and learning was sexual abuse. In one of the sampled schools, a student indicated that “older boys in our school sometimes force the younger boys to enter into a sexual relationship with them. This behaviour affects the younger boys who sometimes drop out of school.” The findings were supported by one of the CQASO’s who commented that:

Child abuse cases include sexual abuse, where some learners are sexually abused either by their colleagues, teachers or their relatives. These students later become parents and are left stigmatized or they drop out of school. This negatively affects their learning and their education in general.

The CQASO’s comment is in agreement with Sango and Chiinze’s (2015) finding that cases of sexual abuse were rampant in schools and led to victims contracting sexually transmitted infections and Aids. This in turn led to absenteeism or possible drop out from school or death. On one hand, children with sexual relationships have difficulties concentrating on classroom activities thus leading to reduced participation and achievement. On the other hand, teachers having sexual relationships with their pupils are likely to practice favouritism, which may lead to disciplinary problems in the class and school while sexual abuse in the home leads to strained interpersonal relationships, which leads to reduced school performance (Sango & Chiinze, 2015).

Child labour was also a form of child abuse that was mentioned to have negative influence on teaching and learning processes. In one of the sampled schools, the principal stated “some learners are forced to do manual labour by their parents so as to earn money to cater for their basic needs.” This implies that these learners are absent from class which translates to minimal learning. These findings concur with

the views of Sango and Chiinze (2015) that child abuse increases the learner's difficulties of learning and chances of reaping a grade. Similarly, Robers, Zhang, Truman and Snyder (2010) note that victims of crime or violence at school are likely to experience loneliness, depression, and adjustment difficulties, and they are more prone to truancy, poor academic performance, dropping out of school, and violent behaviours.

4.6.3 Safety of Children with Special Needs and its Influence on Teaching and Learning Processes

In reference to safety of children with special needs and its influence on teaching and learning processes, the following themes emerged: Provision of facilities for children with special needs; trained personnel to handle children with special needs; and availability of programmes for children with special needs. In one of the sampled schools, the Principal noted that there were no “access paths for the learners with special needs which delayed them from attending classes on time.” This view was echoed by one of the CQASO's who noted that:

Many learners who are physically challenged fail to attend school due to lack of facilities in the schools close to their homes. This is because they rely on assistance from fellow students when available. So, if there are none in their neighborhood or those present are not willing to help, they have no choice but to miss school.

Another respondent stated that “absence of special programmes for children with special needs coupled with absence of teachers of special education affect the performance of learners with special needs negatively.” The findings of this study are in agreement with Hackett and Hortman's (2008) view that availability of school facilities for children with special needs as well as presence of trained teachers on

matters related to the handling of children with special needs can make a difference in both the effectiveness and efficiency of schooling. Learning environments that focus on caring student-teacher relationships, students' social and emotional needs, and high expectations result in students who perform better academically; are more likely to attend school; and have significantly lower rates of emotional distress, violence, delinquency, substance abuse, and sexual activity(Collaborative for Academic, Social and Emotional Learning, 2008).

4.7 Suggestions on Ways School Safety can be enhanced to Promote Teaching and Learning Processes in Public Secondary Schools.

The fifth objective sought suggestions from respondents on the ways school safety could be enhanced to promote teaching and learning process in public secondary schools in Nairobi and Nyeri counties. To realize this objective, the study was guided by the following research question.

How can schools enhance safety to promote teaching and learning processes in Public Secondary Schools in Nairobi and Nyeri counties?

Qualitative data was collected from the responses and grouped according to related themes. Five general themes emerged from the responses on the ways of enhancing school safety: need to increase allocation of finances and human resources; discipline and supervision mechanisms to be enforced / enhanced; need for total commitment by teacher, Boards of Management and CQASOs in the improvement of the schools; and the need to restructure the curriculum to enable schools to have flexible programmes that would increase time for co-curricular activities and training of life-skills to the members of the schools.

Most of the Principals (90%) and majority of the Deputy Principals (85%) in the sampled schools suggested that there was a need to increase allocation of finances and human resources.

The findings indicate that most of the issues on physical infrastructure stemmed from inadequate resources in the schools under study. For instance, inadequate, squeezed, inappropriately located and ill equipped laboratories, libraries, classroom, dormitories, kitchens and lack of necessary safety precautions such as availability of wide windows and doors without grills, poorly serviced and unsuitably located fire extinguishers, were all attributed to inadequate resources, and especially finances, in these schools. The findings also indicate that safety issues related to social environment in sampled schools were not addressed fully due to inadequate resources. It was, therefore, suggested that more human, time and financial resources be allocated to ensure safety in schools. The findings are supported by Gatua's (2013) views that inadequacy of resources in schools hindered proper execution of duties and responsibilities of the stakeholders of the school.

Discipline and supervision was cited as a measure of school safety that could influence teaching and learning processes in 25(56.8%) of the sampled schools. In one instance however, the CQASO commented that though there were discipline and supervision mechanisms in place in most of the schools, there was need to strengthen or enhance them to promote school safety. These findings are in agreement with Mayer's (2007) views that school discipline is a key to school safety. Discipline and supervision go hand in hand in schools. According to Garegae (2008), lack of discipline interferes with the teaching and learning process, and manifests itself in various ways including bullying, vandalism, alcohol and

substance abuse, truancy, inability or unwillingness to do homework. Garegae (2008) further says that if children are not properly taught about moral issues, they graduate into criminal gangs instead of educated citizens who could develop the socio-economic sector of the country.

There is need for school to teach students the alternatives to violence such as peaceful conflict resolution and positive interpersonal relationship skills. Enforcement of the school rules should be taken seriously by all staff. When a school enforces discipline among the students, it sends a strong message of safety to the student body. When asked, what could be done to reduce cases of child abuse, drug abuse, mishandling of children with special needs, proper discipline and supervision topped the list.

According to Mwangi (2008), destruction of facilities in a school could be reduced if parents were able to supervise their children's activities and their peers. Mwangi argued that if parents suspected something was wrong and talked to their children and encouraged them, this would greatly reduce cases of destruction in schools. Similarly, the findings support Marshall's (2009) suggestions that implementation of character education or the promotion of fundamental morals, use of violence-prevention and conflict resolution-curricula, peer mediation, prevention of acts of bullying and provision of a safe environment for staff and students are a number of interventions that can be employed to improve the overall student discipline and school safety.

The need for total commitment of stakeholders was noted by the respondents of the study. One of the Principals noted that:

The broadened educational goals and objectives as a result of changes in socio-economic development have made it necessary for all education stakeholders to get involved in the management of school facilities and implementation of education policies.

These findings concur with those of Clark (2002) who asserted that implementation of government policies were possible where all stakeholders had given maximum support to the implementation process. Clark states that safety of schools depended to a large extent on measures taken to organize and manage such safety.

The findings also indicated the need to restructure the curriculum to enable schools to have flexible programmes that would increase time for co-curricular activities. One of the respondents indicated that “the secondary curriculum was too broad or loaded and needed to be restructured or reduced.” This, according to the respondents, “was necessary so that the students could avoid tension and stress that led them to acts of destruction.” The curriculum, according to the two quality assurance and standards officers sampled, should accommodate practical lessons on how to prevent, prepare and manage disaster. These findings are in line with a study by Kirui, Mbugua and Sang (2011) which pointed that schools in Kisii County faced a number of security challenges like strikes, arson, theft and fighting among other emergencies but head teachers appeared not to know how to go about such emergencies. This scenario was attributed to lack of safety training on how to handle emergencies, students being subjected to too much examinations and inadequate extra-curricular activities for the students. The findings also indicated that, there was no adequate safety training targeting all stakeholders in schools, the few available ones were irregular and failed to provide required information as per the status of the schools depending on the safety gadgets they could afford.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives the general summary of the study, conclusions drawn from the study and makes policy recommendations. The chapter further highlights suggestions for further research as it emerged from the study.

5.2 Summary

The purpose of this study was to determine the status of school safety and its influence on teaching and learning processes in Public Secondary Schools in Nairobi and Nyeri counties, Kenya. This was meant to inform the re-mapping of safety standards and guidelines in Kenya for enhanced teaching and learning in public secondary schools. The study was guided by the following research objectives: to assess the status of school physical infrastructure safety in Public Secondary schools in Nairobi and Nyeri Counties, to assess the status of school social environment safety in Public Secondary schools in Nairobi and Nyeri Counties, to determine the influence of physical infrastructure on teaching and learning processes in public secondary schools in Nairobi and Nyeri Counties, to determine the influence of social environment safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri Counties and to seek suggestions from respondents, ways that school safety could be enhanced to promote teaching and learning in public secondary schools in public secondary schools in Nairobi and Nyeri counties. Descriptive survey design was used as the frame work to guide the study. To achieve the objectives of the study, data were collected from four hundred and forty-three respondents through the use of questionnaires and interviews. The researcher

also used observation guide to supplement the data. The subjects of the study were secondary school Principals and their deputies, form two and three students and county quality assurance and standards officers of the two counties. The study generated both quantitative and qualitative data. Quantitative data was analyzed using descriptive statistics while qualitative data was analyzed thematically and use of voiced verbatim.

The summary of the findings are based on the study objectives.

5.2.1 The Status of School physical infrastructure safety in Public Secondary Schools in Nairobi and Nyeri Counties

The first objective of the study was to assess the status of school physical infrastructure safety in Public Secondary schools in Nairobi and Nyeri Counties.

The study established that School physical infrastructure safety was lacking .Issues such as location of the facility, congestion, lighting and ventilation, condition of the furniture and the roof, presence of grills as well as cleanliness of the facility made schools unsafe for the learners.

5.2.2 The Status of School social environment safety in Public Secondary Schools in Nairobi and Nyeri Counties

The second objective of the study was to assess the status of school social environment safety in Public Secondary schools in Nairobi and Nyeri Counties

The findings established that there was moderate social environment safety. Most schools had controlled Alcohol, drugs and substance abuse. The study also established that cases of child abuse was minimal in the sampled schools but teachers were not well equipped to deal with children who had been abused nor how to handle cases of children with special needs.

5.2.3 Influence of School Physical infrastructure Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties

The third objective was to establish the influence of Physical infrastructure Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri counties. The study established that School Physical infrastructure were not safe. There were schools located near the roads or shopping centers and the noise from these places negatively influenced teaching and learning processes. The study also established that lighting and ventilation in some premises like classrooms and libraries were very poor and this affected the learner's concentration in their studies. In addition, the study established that the student population did not match the physical facilities provided in the sampled schools. Classrooms, dining halls, dormitories, laboratories, libraries toilets were congested and this affected students' learning time and concentration in class. The research established that most of the learning facilities were dirty and had inappropriate furniture and therefore the learner was not comfortable when learning. This situation interfered with their class concentration.

5.2.4 Influence of School social environment Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties

The fourth objective was to establish the influence of school social environment Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri counties.

The study established that misuse of alcohol and drugs was minimal and therefore was not a serious issue on teaching and learning in the sampled schools. The study also established that Child abuse cases in the sampled schools were rare and

therefore did not have serious negative influences on teaching and learning process. However, it was established that a few cases of bullying in form of name calling, use of abusive language as well as manual punishment led to low morale, absenteeism and low self-esteem of the victims which later translated to poor grades and performance of exams.

With regard to children with special needs, the study established that there were very few ramps and access paths to be used by special needs learners. The study also established that the sampled schools lacked trained teachers in special education which was the greatest hindrance for these learners to attend school on regular bases.

5.2.5 Suggestions from respondents on ways that school safety can be enhanced to promote teaching and learning in Public Secondary Schools in Nairobi and Nyeri Counties

The fifth objective sought suggestions from respondents on ways that school safety could be enhanced to promote teaching and learning in public secondary schools in the sampled schools. Qualitative data was generated from the suggestions given, coded and then grouped according to related themes.

The study established from the responses that the sampled schools had not fully implemented the safety guidelines due to inadequate resources. It was therefore suggested that more human, time and financial resources be allocated to ensure school administrators implement the safety guidelines in schools.

The findings also established from the responses that discipline and supervision mechanisms were in place but needed to be enforced in most of the sampled schools to improve reduce students' unrest and hence ensure on school safety.

The study further established that total commitment by stakeholders was inadequate. The respondents therefore suggested that all stake holders should be committed to ensure school safety. In addition; the study established from the respondents that there was need to restructure the existing curriculum to enable schools to have flexible programmes that would increase time for co-curricular activities and that safety training of all stakeholders to enable them handle safety issues when they arose was inadequate in the sampled schools.

5.3 Conclusions

This section focuses on conclusions based on findings by objectives that guided the study. They include:

5.3.1 The Status of School physical infrastructure Safety in Public Secondary Schools in Nairobi and Nyeri Counties

This study concludes that the sampled Schools were not safe since they had not adhered to Safety Standards Guidelines in terms of School physical infrastructure Safety. There were safety issues such as location of the facility, congestion, lighting and ventilation, condition of the furniture and the roof as well as cleanliness of the facility that needed to be improved.

5.3.2 The Status of School social environment safety in Public Secondary Schools in Nairobi and Nyeri Counties

The study concludes that schools had tried to ensure that social environment was safe. However Schools needed to pay more attention to safety issues of learners with special needs. Though most of the sampled schools had complied with some safety guidelines regarding control of alcohol, drug and substance abuse, teachers

had little knowledge of how to handle cases of abused children and/or special needs children.

5.3.3 Influence of School physical infrastructure Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties

This study concludes that physical infrastructure safety influenced teaching and learning processes. In Schools where the Safety guidelines concerning physical infrastructure for schools were followed, proper teaching and learning took place. The opposite was witnessed in schools that failed to measure up to the Safety Standards Manual Guideline for schools.

5.3.4 Influence of School Social environment Safety on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties

On Social Environment Safety, the study concludes that in the schools where there was misuse of drugs, child abuse, mistreatment of special needs learners, teaching and learning process was negatively influenced. Absence of the above social environment safety issues ensured teaching and learning processes.

5.3.5 Suggestions from respondents on ways that school safety can be enhanced to promote teaching and learning in Public Secondary Schools in Nairobi and Nyeri Counties

This study concludes that even though finances and human resource were insufficient, enforces of discipline through the introduction of safety programmes and practices, as well as commitment to improving safety of physical infrastructure and social environment, was within the control of the school stakeholders.

5.4 Recommendations

This section makes study recommendations in the light of the findings and conclusions made. They include those related to policy and practice and suggestions for further research.

5.4.1 Policy and Practice Recommendations

Objective 1: To assess the status of school physical infrastructure safety in Public Secondary schools in Nairobi and Nyeri Counties.

On status of school safety, the study established that location, congestion, presence of grills on the windows and doors, lighting and ventilation, condition of the furniture and the roof as well as cleanliness of the school physical infrastructure influenced school safety.

The study therefore recommends that the relevant authorities such as County Quality Assurance and Standards' officers, The Ministry of Public Works officers and The Ministry of Health officers pay frequent visits (probably quarterly) to schools to inspect and ensure that policy guidelines concerning safety of physical infrastructure are followed.

Specifically Quality Assurance and Standards Officers from the Ministry of Education should ensure:

- i) Clean water with an adequate number of tap stands is provided within easy reach of all students to guard against health hazards and the exploitation of students to fetch water from great distances.
- ii) Schools have fences to avoid accidents and prevent the entry of unauthorized persons.
- iii) First-aid kits are available for immediate use in case of accidents.

- iv) Appropriate lighting is in place, especially in boarding schools where students reside after dark.
- v) Schools to follow the ministry of education guidelines concerning enrolment so as not to overload school facilities which translates to poor performance.
- vi) The government allocates more funds to the Ministry of education to increase schools in order to control over enrolment in the existing schools in over populated regions.

Objective 2: To assess the status of school social environment safety in Public Secondary schools in Nairobi and Nyeri Counties.

This study established that social environment issues in schools such as alcohol, drug and substance abuse, child abuse and children with special needs, needed to be addressed to ensure school safety.

The study therefore recommends that Kenya Institute of Curriculum Development (KICD) re-structure the teacher training curriculum to include emerging issues in the school curriculum such as assistance of children who are abused and those with special needs.

Specifically, School managers and administrators should ensure that:

- i) Schools enhance discipline and supervision mechanism which are likely to provide a safe and healthy environment.
- ii) All teachers attend an in-service training on how to assist reformed drug and alcohol abusers, special needs cases as well as cases of children who have been abused.

- iii) Forums are in place where parents of special needs children are sensitized on how to handle these children as well as the need to take them to school.
- iv) Schools have proper fences and lockable gates to reduce cases of students sneaking out of school and unauthorized persons from entering the school compound.

Objective 3: To determine the influence of school physical infrastructure safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri Counties.

The study established that physical infrastructure safety influenced teaching and learning processes. In schools where the safety guidelines were followed, teaching and learning was positively influenced while where the safety guidelines on physical infrastructure were neglected, teaching and learning was negatively influenced.

The study therefore recommends that Quality Assurance and Standards Officers from the Ministry of Education should ensure that:

- i) Schools follow strictly the guidelines concerning enrolment so that students admitted do not over stretch school's physical facilities and hence interfere with their health as well as the teaching and learning process.
- ii) Schools near noise place such as roads or shopping centers have installed sound proof roofing and side boards in their classes to reduce noise from outside the classes that is likely to interrupt teaching and learning process.

Objective 4: To determine the influence of school social environment safety on teaching and learning processes in public secondary schools in Nairobi and Nyeri Counties.

The study established that school social environment safety influenced teaching and learning processes. In schools where the safety guidelines were followed, teaching and learning was positively influenced while where the safety guidelines were neglected, there was negative influence on teaching and learning process.

The study therefore recommends that School managers with the help of Quality Assurance and Standards Officers from the Ministry of Education ensure that:

- i) Cases of drugs, alcohol and substance abuse are eliminated from schools to reduce chronic absenteeism and poor examination grades
- ii) Schools strengthen guidance and counseling programmes so that reformed students improve on their performance.
- iii) Schools create forums where all members of the school including children with special needs are trained on life skills and protective strategies against any form of harassment that may derail teaching and learning processes.

Objective 5: To seek Suggestions from respondents on ways that school safety can be enhanced to promote teaching and learning in Public Secondary Schools in Nairobi and Nyeri Counties

From the suggestions given by the respondents, this study established that schools lacked adequate resources to enable the improvement of existing and additional physical infrastructure,, stakeholders were not totally committed to addressing school safety issues, and schools lacked mechanisms to enforce positive discipline.

This study therefore recommends that:

- i) The Government, through the ministry of Education increase allocation of finances and remit all resources on time so as to enable schools to improve and

construct more physical facilities to enable proper teaching and learning process to take place.

- ii) The School Board of Management ensure that their schools create a mechanism that would ensure total involvement by all Students, Teachers, Parents and the community in order to improve school safety.
- iii) The School Board of Management to improve mechanisms to enhance discipline so as to positively influence teaching and learning processes.

5.4.2 Suggestions for Further Studies

1. Based on the findings of the study, it is suggested that there is need to carry out studies to establish the level of compliance to physical facilities guidelines at other Education levels such as primary schools, diploma colleges and universities in Kenya.
2. A study can be done to find out which safety variables had the highest influence on teaching and learning processes. This may assist education stakeholders to know where to put more emphasis when dealing with safety issues.
3. A comparative study can be done to find out which schools - public or private- has more safety issues and how they influence their learning outcomes.

REFERENCES

- Adelman, H.S., & Taylor, L. (2006). School and community collaboration to promote a safe learning environment. State education standard. *Journal of the National Association of State Boards of Education*, 7, 38-43.
- Afridi, F. (2011). The impact of school meals on school participation: Evidence from rural India. *The Journal of Development Studies*, 47 (11), 1636-1656.
- Alba, D. J. & Gable, R. K. (2012). School safety planning: Barriers to implementation perceived by district leadership and first responders NERA Conference Proceedings. Paper presented at the 43rd annual meeting of the Northeastern Educational Research Association, October 19, 2012, Rocky Hill, CT.
- American Library Association Archives. (n.d.). *Intellectual freedom committee*. Chicago: ALA.
- Ali, F., & Amin, M. (2013, June 15-17). *The influence of physical environment on emotions, customer satisfaction and behavioural intentions in Chinese resort hotel industry*. KMITL-AGBA Conference, Bangkok, Thailand.
- Ali, F., Kim, W., & Ryu, K. (2016). The effect of physical environment on passenger delight and satisfaction moderating effect of national identity. *Journal of Tourism Management*, 57 (3), 213-224.
- Arcia, E. (2007). A comparison of elementary / k-8 and middle school's suspension rates. *Urban Education*, 42, 456-469.
- Arum, R. (2003). *Judging school discipline: The crisis of moral authority*. Harvard University Press: Cambridge, MA.
- Arum, R. (2012). *Improving learning environments: School discipline and student achievement in comparative perspective (Studies in social inequality)*. Palo Alto: Stanford University Press.
- Berry, M.A. (2002). *Healthy school environment and enhanced educational performance: The case of Charles young elementary school Washington, DC*. Retrieved from http://www.carpet-rug.org/carpet-and-rug-industry/research-and-resources/scientific-research/Charles_young.cfm
- Best, J., & Kahn, J. (2004). *Research in education* (7th ed.). New Delhi: Prentice Hall of India Private Limited.

- BEST (2005). *Comprehensive planning ensures the most efficient and cost effective use of tax payers' dollars*. Retrieved from [www. 21csf.org/csf home/publications/modelpolicies/planning section](http://www.21csf.org/csf/home/publications/modelpolicies/planning%20section)
- Black, S., Washington, E., Trent, V., Harner, P., & Pollock, E. (2010). Translating the Olweus bullying prevention program into real-world practice. *Health Promotion Practice, 11* (1), 733-741.
- Borkum, E., Fang, H., & Leigh, L. (2013). *The effects of schools libraries on language skills: Evidence from a randomized controlled trial in India*. Massachusetts: Akshara Foundation.
- Branham, D. (2004). The wise man builds his house upon the rock: The effects of inadequate school building infrastructure on student attendance. *Social Science Quarterly, 85* (5), 1112-1128.
- Bruening, T. H., & Hoover, T. S. (1991). Personal life factors as related to effectiveness and satisfaction of secondary agricultural teachers. *Journal of Agricultural Education, 32* (4), 37-43.
- Breslau, J. (2010). *Health in childhood and adolescence and high school dropout: California dropout research project*. Santa Barbara, CA: University of California Press.
- Brooks, S. M. (2017). *Violence among students and school staff: Understanding and preventing the causes of school violence*. North Charleston: Create Space Independent Publishing Platform
- Broderick, A. (2018). Equality of What? The Capability Approach and the Right to Education for Persons with Disabilities. *Journal of Social Inclusion, 6*(1), 29-39.
- Brown, J., Beardslee, W. H., & Prothrow-Stith, D. (2008). *Influence of school breakfast on Children's learning and health: An analysis of the scientific research*. Gaithersburg, MD: Sodexo Press.
- Brown, P., & Albert, P. (2002). Education and poverty in rural China. *Economics of Education Review, 21* (6), 523-41.
- Bryman, A. (2001). *The debate about qualitative and quantitative research*. University of South Africa: E Reserves.

- Bullock, C. (2007). *The relationship between school building conditions and student achievement at the middle school level in Commonwealth of Virginia* (Unpublished doctoral thesis), Virginia Polytechnic Institute and State University), USA.
- Calabrese, R. L. (2000). *Leadership for safe schools: A community-based approach*. London: Scarecrow Press Inc.
- Carter, S.P. (2001). *Surrounded by safety: Crime prevention through environmental design (CPTED). Handbook for youth*. Miami, FL: Office of Juvenile Justice and Delinquency Prevention and youth Crime Watch of America.
- Caruso, A., Freeman, J., Dreibelbis, R., Saboori, S., Richard Muga, & Rheingans., R. (2014). Assessing the impact of a school-based latrine cleaning and hand washing program on pupil absence in Nyanza Province, Kenya: A cluster-randomized trial. *The American Journal of Tropical Medicine and Hygiene*, 94(6) 1418-1425.
- Cash, C.S. (1993). *Building condition and student achievement and behaviour* (Unpublished doctoral dissertation), Virginia Polytechnic and State University, Blacksburg, USA.
- Celik, V. (2000). *Classroom management*. Ankara: Nobel Publishing House.
- Chancellor, B. (2013) Primary school playgrounds: Features and management in Victoria, Australia. *International Journal of Play*, 2 (2), 63-75.
- Chatterji, M. (2006). Reading achievement gaps, correlates and moderators of early reading achievement: Evidence from the early childhood longitudinal study (ECLS) kindergarten to first grade sample. *Journal of Educational Psychology*, 98(3), 489-507.
- Cheloti, S. K., & Gathumbi, A. M (2016). Curbing drug and substance abuse in secondary schools in Kenya: The disconnect in school community intervention strategies. *Elixir international journal of Education Technology*, 95, 40881-40888
- Chumba, S. K. (2006). *Perception of secondary teachers and principals on the planning of school buildings in Nandi South District* (Unpublished master's thesis), University of Eastern Africa, Baraton, Kenya.
- Church, G.M. (2002). *In the eyes of the beholder: How libraries have been viewed overtime*. New York: Haworth Inn Press.

- Clark, C. (2002). Texas state support for school facilities, 1971-2001. *Journal of Education Finance*, 27(2), 683-700.
- Clark, D., Martorell, P., & Rockoff, J (2009) *School principals and school performance*. National Center for Analysis of longitudinal Data in Education Research. University of Missouri, Columbia. CALDER Working paper Series No.38/2009
- Coleman, M. (2003). Gender and the orthodoxies of leadership. *School Leadership and Management Journal*, 23(3), 325 – 339.
- Corocoran, T., Walker, L. J., & White, J. L. (1998). *Working in urban schools*. Washington, DC: Institute for Educational Leadership.
- Cresswell, J.W., & Plano Clark, V.L. (2011). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage Publications.
- Davies, D., & Dodd, J. (2002). Qualitative research and the question of rigor. *Qualitative Health Research*, 12 (2), 279-289.
- Dee, T.S., & Evans, W, N. (2003). Teen drinking and educational attainment: Evidence from two-sample instrumental variables estimates. *Journal of Labour Economics*, 21(1), 178–209.
- Delidou, E., Matsouka, O., & Nikolaidis, C. (2015). Influence of school playground size and equipment on the physical activity of students during recess. *European Physical Education Journal* 22 (2), 215-224.
- DeVoe, J. F., Peter, K., Kaufman, P., Miller, A. K., Noonan, M., Snyder, T. D., & Baum, K. (2004). *Indicators of school crime and safety*. Washington, DC: Departments of Education and Justice.
- DeVoe, J. F., Peter, K., Kaufman, P., Miller, A., Noonan, M., Snyder, T. D., & Baum, K. (2004). *Indicators of school crime and safety*. Washington, DC: Government Printing Office.
- Deweese, S. (1999). *Improving rural school facilities for teaching and learning*. Charleston WV: ERIC Document Reproduction Service.
- Díaz-Vicario, A., & Sallán, G.J. (2017). A comprehensive approach to managing school safety: case studies in Catalonia, Spain. *Journal of Educational Research*, 59(1) 89-106.

- Dierkx, R. J. (2003). *Cool schools for hot suburbs: Models for affordable and environmentally responsive schools in Nairobi, Kenya* (Doctorate thesis), Eindhoven University of Technology, The Netherlands.
- Donmez, B., & Güven, M. (2002). School safety perceptions and expectations of high school teachers and school managers. *Journal of Lifelong Education*, 75(74), 60-64.
- Dutton, M., Goodman, L., & Bennett, L. (2000). *Court-involved battered women's responses to violence: the role of psychological, physical, and sexual abuse in violent domestic relations*. New York: Springer Publishing Company.
- Earthman, G. (2004). *School facility condition and student academic achievement*. Los Angeles, CA: UCLA'S Institute for Democracy, Education and Access (IDEA).
- Earthman, G. I., & Lemasters, L. K. (2009). Teacher attitudes about classroom conditions. *Journal of Educational Administration*, 47 (3), 323-335.
- Elias, M., & Arnold, H. (Eds.). (2006). *The educator's guide to emotional intelligence and academic achievement*. Thousand Oaks, CA: Corwin Press.
- Evans, G.W., Yoo, M.J., & Sipple, J. (2010). The ecological context of student achievement: School building quality effects are exacerbated by high levels of student mobility. *Journal of Environmental Psychology*, 30, 239–244.
- Fehrler, S., Michaelowa, K., & Wechtler, A. (2009). The effectiveness of inputs in primary education: Insights from recent student surveys for Sub-Saharan Africa. *Journal of Development Studies*, 45 (9), 1545-1578.
- Filardo, M. (2008). *Good buildings, better schools: An economic stimulus opportunity with long-term benefits*. *Economic policy institute briefing paper*. Retrieved from [http://www.21csf.org/csf-home/publications/Good buildings better schools-EPI-Paper.pdf](http://www.21csf.org/csf-home/publications/Good%20buildings%20better%20schools-EPI-Paper.pdf).
- Finkle, D.L. (2000). *Teaching with your mouth shut*. Portsmouth, NH: Boynton / Book Publishers.
- Fisher, K. (2000). *Building better outcomes. The impact of school infrastructure on student outcomes and behaviour*. Department of Education, Training and Youth Affairs, Australian Government: Schools Issues Digest.

- Fontana, A., & Frey, J.H. (2000). *The interview of structured questions to negotiate text*. Thousand Oaks: Sage Publications.
- Foster, S.M. (2002). *Perceptions of parents, students, teachers and administrators of internal and external factors that affect school safety: A case study*. Retrieved from <http://linkinghub.elsevier.com>
- Gall, J.P., & Borg, W. R. (2010). *Applying educational research: How to read and use research to solve problems in practice* (6th ed.). New York: Allyn and Bacon.
- Garegae, K.G. (2008). The crisis of student discipline in schools. An impact of culturally conflicting disciplinary strategies. *Education Research and Review*, 3 (1), 48 - 55.
- Gatua, J. (2015). Assessment on the implementation of Ministry of education safety guidelines on physical infrastructure in public secondary schools in Nairobi West Region. *Journal of research on humanities and Social Sciences*, 5 (3), 1-9.
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference* (4th ed.). Boston: Allyn and Bacon.
- Gertel, S. J., McCarty, P.J., & Schoff, L. (2004). High performance schools equals high performing students. *Educational Facility Planner*, 39 (3), 20-24.
- Ghodse, H. (2003). *Drug and addictive behaviour* (3rd ed.). New York: Cambridge University Press.
- Glariana. E., & Solar, B. (2015). Status of schools safety and security among elementary schools in the fifth class municipality. *Asia Pacific Journal of Multidisciplinary Research*, 3(5) 10-18.
- Glewwe, P., Eric, A., Hanushek, S., Humpage., & Renato, R. (2013). *School resources and educational outcomes in developing countries: A review of the literature from 1990 to 2010*. Chicago: University of Chicago Press.
- Glewwe, P., & Jacoby, H. (1994). Student achievement and schooling choice in low-income countries: Evidence from Ghana. *Journal of Human Resource*, 29 (3), 843– 864.

- Glewwe, P., Michael, K., Sylvie, M., & Eric, Z. (2004). Retrospective vs. prospective analyses of school inputs: The case of flip charts in Kenya. *Journal of Development Economics*, 74 (1), 251-268.
- Glick, P., Jean, R., & Sahn, D. E. (2011). Family background, school characteristics, and children's cognitive achievement in Madagascar. *Education Economics*, 19 (4), 363-396.
- Glickman, C. D. (Ed). (2004). *Letters to the next president*. New York: Teachers College Press.
- Golden, M.E. (2013). *Assessing needs of middle school Agriculture teachers in Georgia*. (Doctorate thesis), Auburn University, USA.
- Gorard, S. (2003). *Quantitative methods in social sciences*. New York: Continuum.
- Graham, W. (2013). Keeping your library safe: blackbelt librarians. [Presentation]. Info People. Retrieved from <https://infopeople.org/civicrm/event/info?reset=1&id=81>
- Greenfield, T. (2002). *Research methods for postgraduates*. Oxford Press: Wiley, John and Sons Incorporated.
- Gregory, A., & Weinstein, R. S. (2004). Connection and regulation at home and in school: Predicting growth in achievement for adolescents. *Journal of Adolescent Research*, 19, 405–427.
- Gregory, R. J. (1992). *Psychological testing; History principles and application*. Boston: Allyn and Bacon.
- Gwengo, M. (2003). *The assessment of problems encountered in the implementation of Guidance and Counseling* (Unpublished Master's dissertation), Zimbabwe Open University Press, Zimbabwe.
- Gyekye, S.A., & Salminen, S. (2010). Organizational safety climate and work experience. *International Journal of Occupational Safety and Ergonomics (JOSE)*, 16 (4), 431–443.
- Glewwe, P., & Krause, B. (2016). School infrastructure and educational outcome: A literature Review. *Economic Journal of the Latin American and Caribbean economic Association*, 17 (1), 95-130.
- Hackett, P. T., & Hortman, J. W. (2008). The relationship of emotional competencies to transformational leadership: Using a corporate model to

- assess the dispositions of educational leaders. *Journal of Educational Research & Policy Studies*, 8 (1), 92-111.
- Han, H. (2013). Effects of in-flight ambience and space / function on air travelers' decision to select a low-cost airline. *Journal of Tourism Management*, 37 (1), 125–135.
- Hasted, D.D., Clifton, S.C., & Wilson, D.T. (2014). *Library as safe haven: disaster planning, response, and recovery: a how-to-do-it manual for librarians*. Chicago, Illinois: American Libraries Association Neal Schuman Publishers.
- Haverinen - Shaughnessy, U., & Shaughnessy, R. (2011). Association between substandard classroom ventilation rates and students' academic achievement. *Indoor Air*, 21 (2), 121-131.
- Henning, E. (2004). *Finding your way in qualitative research*. Pretoria: Van Schaik.
- Hitchcock, G., & Huges, D. (1989). *Research and the teacher: A qualitative introduction to school-based research*. London: Routledge.
- Horner, R. (2009). A randomized, wait-list controlled properness trial assessing school-wide positive behavior support in elementary schools. *Journal of Positive Behaviour Interventions*, 11, 133-144.
- Hoy, W. (2012). School characteristics that make a difference for the achievement of all students: A 40-year odyssey. *Journal of Educational Administration*, 50 (1), 76-97.
- Hughes, M. (2002). *Research methods for postgraduates*. London: Arnold.
- Imbosa, M. (2002). *An investigation into strategies used in addressing drug abuse problems: A case study of Nairobi provincial boys' secondary schools* (Unpublished master's project), Kenyatta University, Kenya.
- International Finance Corporation (IFC). (2010). *A handbook on the disaster and emergency preparedness. Guidance for schools*. Pennsylvania: Health and Education Department Press.
- Jagero, N.O. (2011). *An evaluation of school environmental factors affecting performance of boarding secondary students in Kenya*. Kampala International University, Dar es Salaam.

- Javed, T., & Asgar, A. (2017). Association between classroom environments with academic achievement of secondary school girls in Pakistan. *Mediterranean Journal of Social Sciences*, 8(2), 121-127.
- Kadel, S., & Follman, J. (1993). *Reducing school violence in Florida*. Washington, DC: South Eastern Regional Vision for Education.
- Kamarulzaman, N., Saleh, A. A., Hashim, S. Z., Hashim, H., & Abdul-Ghani, A. A. (2011). An overview of the influence of physical office environments towards employees. *Procedia Engineering*, 20, 262-268.
- Kandel, K., Neupane, B. & Giri, B (2017). Status of chemistry lab safety in Nepal. *PLoS ONE*, 12(6), 1-9
- Katherine, B., & Dana, M (1999). *The metropolitan life survey of the American teacher's violence in America's public schools - five years later*. New York: Metropolitan Life Insurance Association Press.
- Khan, S. R., & Keifer, D. (2007). Educational production functions for rural Pakistan: A comparative institutional analysis. *Education Economics*, 15 (3), 327-342.
- Khattar, M. (2003). Cool and dry - dual path approach for a Florida school. *Ashrae Journal*, 45(5), 58-60.
- Kimmel, R. P. (2000). Pupils' and teachers' health disorders after renovation of classrooms in a primary school. *Gesundheitswesen*, 62 (12), 660-664.
- King'endo, M. (2010). *Incidence and extent of substance abuse among secondary school students in Nairobi province, Kenya: Implications for specialized intervention* (Doctorate thesis), Kenyatta University, Kenya.
- Kipng'eno, R., & Kyalo, B. (2009). Safety awareness and preparedness in secondary schools in Kenya. *Educational Research and Review*, 4 (8), 379-384.
- Kirui, K., Mbugua, Z., & Sang, A. (2011). Challenges facing head teachers in security management in public secondary schools in Kisii County in Kenya. *International Journal of Humanities and Social Science*, 1(15), 228-233.
- Kisantas, A., Ware, H. W., & Maritnez-Arias, R. (2004). Students' perceptions of school safety: Influences by community, school environment, and substance use variables. *The Journal of Early Adolescence*, 24, 412-430.

- Koch, S.F., & Ribar, D.C. (2001). A sibling analysis of the influences of alcohol consumption onset on educational attainment. *Contemporary Economic Policy*, 19 (2), 162–174.
- Konstantopoulos, S., Borman, G. D. (2011). Family background and school effects on student achievement: A multilevel re-analysis of the Coleman data. *Teachers College Record*, 113(1), 97–132.
- Krejcie, R.V., & Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Kristin, J., Stoddart, R. (2016). Library Safety through Design: Using a Checklist Approach at the University of Idaho, *Journal of Library Administration*, 56 (7), 777-789.
- Kurth, J., Morningstar, E., Hicks, A.T. & Templin, J. (2018). Exploring the relationship between school transformation and inclusion: A Bayesian multilevel longitudinal analysis. *Inclusion*, 6 (1), 19-32.
- Kyalo, P., & Mbugua, R. (2011). Narcotic drug problems in Muranga's South District of Kenya: A case study of drug abuse by students in secondary schools. *Africa Journal of Social Sciences*, 1(2), 73-83.
- Leach, R., Machakanja, P., & Mandoga, J. (2002). *Preliminary investigation of the abuse of girls in Zimbabwe junior secondary schools*. London: Department for International Development.
- Leary, M. (2001). *Introduction to behavioral research methods* (3rd ed.). Boston: Allyn and Bacon.
- Lee, V. E., Tia, L. Z., & Kenneth, N. R. (2005). School effectiveness in 14 Sub-Saharan African countries: Links with 6th graders' reading achievement. *Studies in Educational Evaluation*, 31, 207-246.
- Legters, N., Balfanz, R., & McPartland, J. (2002). *Solutions for failing high schools: Converging visions and promising models*. Baltimore, MD: Center for Social Organization of Schools, Johns Hopkins University.
- Leithwood, K., & Jantzi, D. (2008). Linking leadership to student learning: The contributions of leader efficacy. *Educational Administration Quarterly*, 44(4), 496–528.

- Leonard, C. (2013). *Review and evaluation of LCD inclusive education projects - Kenya and Botswana*. Nairobi: Leonard Cheshire.
- Lewis, M. (2000). *Where children learn: Facility condition and student test performance in Milwaukee public schools*. Scottsdale, AZ: Council of Educational Facility Planners.
- Lloyd, C.B., Sahar, E., Wesley, H., & Barbara, S. M. (2003). The impact of educational quality on school exit in Egypt. *Comparative Education Review*, 47 (4), 444-467.
- Ludwig, V. B. (1968). *General system theory: Foundations, development, applications*. New York: George Braziller.
- Lulua, L.R. (2008). *Addressing school safety in Uganda*. Kampala: UPHOLD - USAID.
- Lupinacci, J. (2002). A safe haven. *American School and University Journal*, 75 (8), 20-25.
- Lussier, C.C., & FitzPatrick, C. (2016). Feelings of safety at school, socioeconomic functioning and classroom engagement. *Journal of Adolescent Health*, 58 (5), 543-550.
- Lynch, C., Toulon, E.D., Carillo, J.S., & Elsa-Sofia, M. (2010). *Effectiveness of suspension on school safety: Student perceptions based on suspension status and gender in secondary education in Puerto Rico*. Retrieved from <http://www.hiceducation.org/>
- Lyons, J.B. (2002). The learning environment: Do school facilities really affect child's education? *Learning by design*, 11, 10-13.
- Macharia, H.K. (2012). *Influence of school playground safety on the participation of pre-school children in outdoor activities in Central division, Naivasha district, Kenya* (Master's thesis), University of Nairobi, Kenya.
- Maithya, R.W. (2009). *Drug abuse in secondary schools in Kenya: Developing a programme for prevention and intervention* (Doctorate Thesis), University of South Africa, South Africa.
- Mansori, S., A. Vaz & Z. M. M. Ismail(2014). Service quality, satisfaction and student loyalty in Malaysian private education. *Journal of Asian Social Science*, 10 (7), 57-66

- Maoulidi, M. (2008). *Education needs assessment for Kisumu city, Kenya*. MCI Social Sector Working paper Series No. 01/2008. 432 Park Avenue South, NY.
- Mapfumo, J.F. (1999). Focus on the need for guidance and counseling. *Teacher in Zimbabwe*, 6 (7), 3-30.
- Marshall, J.H. (2009). School quality and learning gains in rural Guatemala. *Economics of Education Review*, 28 (2), 207-216.
- Marquet, C. (2013). Guide for Preventing and responding to school violence, *International Association of Chiefs of Police*, (2nd Ed) Carolina, USA.
- Maritim, J., King'oo, M., & Catherine, B. (2015). Physical infrastructural safeness in public boarding secondary schools in Kenya. *International Journal of Education and Research*, 3 (7), 191-200.
- Masita, M. (2004). Initiatives in counteracting drug abuse. *Journal on Social and Religious Concern*, 17 (3), 57-69.
- Maxwell, S., Reynolds, K. J., Lee, E., Subasic, E., & Bromhead, D. (2017). *The impact of school climate and school identification on academic achievement: Multilevel modeling with student and teacher data*. Retrieved from <http://doi.org/10.3389/fpsyg.2017.02069>
- May, D. C. (2014). *School safety in the United States: A reasoned look at the rhetoric*. Durham: Carolina Academic Press.
- McGowen, R. S. (2007). *The impact of school facilities on student achievement, attendance, behavior, completion rate and teacher turnover rate in selected Texas high schools* (Doctoral dissertation), Texas A & M University, USA.
- McMillan, J.N., & Schumacher, S. (2006). *Research in education- evidence-based enquiry* (6th ed.) USA: Pearson Education Inc.
- McMullen, D. (1999). *Supporting safe, secure and caring schools in Alberta*. Edmonton, AB: Alberta Learning and Special Education Association Press.
- Mgadla, X. (2006). An investigation into the basic safety and security status of school's physical environments. *South African Journal of Education*, 26 (4), 566-580

- Miller, A. M (2003). *Violence in USA public schools: 2000 school survey on crime and safety*. Washington: Department of Education, National Center for Education Statistics Press.
- Ministry of Education (2005). *Sessional paper NOI 2005 on education, research and training*. Nairobi: Jomo Kenyatta Foundation.
- Ministry of Education (2008). *Safety standards manual for schools in Kenya church and world service*. Nairobi: Jomo Kenyatta Foundation.
- Muindi, M. (2012). *Impact of free secondary education on quality of secondary education in Katangi, Yatta District-Machakos County, Kenya* (Unpublished Thesis), Kenyatta University, Kenya.
- Munyasi, A.W. (2002). *Introduction to disaster management: Institute of open learning module*. Kenyatta University, Kenya.
- Musu-Gillette, L., Zhang, A., Wang, K., Zhang, J., & Oudekerk, B.A. (2017). *Indicators of School Crime and Safety: 2016* (NCES 2017-064/NCJ 250650). National Center for Education Statistics, U.S. Department of Education and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC.
- Mwangi, J.W. (2008). *A survey of the status of disaster preparedness in Public secondary schools: A case of Kiharu Division, Muranga District* (Master's thesis), Kenyatta University, Kenya.
- Nabaseruka, J. (2010). *Effect of students living conditions on their academic performance in secondary schools of Goma Sub-County, Mukono District* (Master's thesis), Makerere University, Uganda.
- Nagler, S.K.(2016). Effective classroom - management and positive teaching. *Journal of English Language Teaching*, 9 (1), 163-172.
- Ndeti, M.D., Ongecha, F.A., Khasakhala, L., Syanda, J., Mutiso, V., Otieno, C.J., Odhiambo, G., & Kokonya, D. A. (2007). Bullying in public secondary schools in Nairobi, Kenya. *Journal of Child and Adolescent Mental Health*, 19 (1), 45–55.
- Nelson, C. M., Scott, T. M., Gagnon, J.C., Jolivette, K., & Sprague, J.R. (2008). Positive behavior support in the juvenile justice system. *Journal of Behavior Analysis of Offender and Victim: Treatment and Prevention*, 1(3), 259–272.

- Ngesu, L., Gunga, S., Wachira, L., Muriithi, E., & K'Odhiambo, A.K. (2013). Bullying in Kenyan secondary schools: Manifestations, causes, consequences and mitigation measures. *International Journal of Innovative Research & Studies*, 3(1), 553-567.
- Ngesu, L.M., Ndiku, J., & Masese, A. (2008). Drug dependence and abuse in Kenya secondary schools: Strategies for intervention. *Academic Journal*, 304-330.
- Njeri, A. N., & Ngesu, L. (2014). Causes and influences of drug and substance abuse among secondary school students in Dagoretti division, Nairobi West District-Kenya. *Global Journal of Interdisciplinary Social Studies (G.J.I.S.S)*, 3(3), 1-4.
- Njora, H. (2008). Examining differences in Mathematics and reading achievement among grade 5 pupils in Vietnam. *Studies in Educational Evaluation*, 34(3), 155-164.
- Nsubuga, E.H.K. (2000). *Fundamentals of educational research*. Kampala: MK Publications (U) Limited.
- Nthenya, D. (2011). Situation analysis of school's safety and school administration participation in public secondary schools, Kenya. *International Journal of Current Research*, 3(6), 278-28
- Nyabuti, J., Role, E., & Balyange, J. (2015). Safety implementation framework for secondary schools in Kenya. University of Eastern Africa, Baraton. *Baraton Interdisciplinary Research Journal*, 27-40.
- Ögel, K., Tari, I., & Eke, C.Y. (2005). *Prevention of crime and violence in school*. İstanbul: New Publishing.
- Ogula, P. A. (2005). *Research methods*. Nairobi: CUEA Publications.
- Okebukola, P. (2000). *The child-friendly school as a new dimension in educational development*. Lagos: Macmillan Publisher.
- Okoth, J. (2014). Teachers' and Students' perceptions on bullying behaviour in public secondary schools in Kisumu, Kenya. *Journal of Educational and social Research*, 4(6), 125-138
- Okpala, P. (2006). *Researching learning outcomes at basic education level in Nigeria*. Inaugural Lecture University of Nigeria, Nigeria.

- Okumbe, S. (1999). *Educational management, theory and practice*. Nairobi: Nairobi University Press.
- Oluremi, F. (2012). Creating a friendly school learning environment for Nigerian children: *European Scientific Journal*, 8 (8), 138—147.
- Omolo, D.O., & Simatwa, E.M. (2010). *An assessment of the implementation of safety policies in public secondary schools in Kisumu East and West Districts, Kenya* (Master's thesis), Maseno University, Kenya.
- Owens, L. K. (2002). *Introduction to Survey research design. SRL Fall 2002 seminar series*. Retrieved from <http://www.srl.uic.edu>
- Patton, M. (1990). *Qualitative evaluation and research method*. London: Professional Publishers.
- Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3rd ed). Thousand Oaks, CA: Sage Publications, Inc.
- Payton, J., Weissberg, R.P., Durlak, J.A., Dymnicki, A.B., Taylor, R.D., Schellinger, K.B., & Pachan, M. (2008). *The positive impact of social and emotional learning for kindergarten to eighth-grade students: Findings from three scientific re-views*. Chicago, IL: Collaborative for Academic, Social, and Emotional Learning
- Peach, L., & Reddick, T. L. (1991). Counselors can make a difference in preventing adolescent suicide. *Journal of School Counselor*, 39, 107-110.
- Peterson, B. (2002). School injury trends. *The Journal of School Nursing*, 18 (4), 219-225.
- Pouget, M. (2010). *Reasons for changing classrooms environment*. Accessed on 30th May from http://www.eho.com/info_7870094_reasons_hanging-classrooms-environment.html
- Punch, M. (1994). Politics and ethics in qualitative research. In N. Denzin and Y. Lincoln (Eds.) *Handbook of Qualitative Research* (pp. 83-97). Thousand Oaks: Sage.
- Richards-Babb, M., BiaUshoff, J., Carver, J. S., Fisher, K., Robertson-Honecker, J., Amyotte, P., & Robertson, J. (2010). Keeping it safe: Chemical safety in the high school laboratory 6. *Journal of Chemical Health & Safety*. 7(1), 6-14

- Reid, D. L. (2000). Building a safe environment in American school and University. *Journal of the American Medical Association*, 73(3) 386-390.
- Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M., & Salovey, P. (2012). Classroom emotional climate, student engagement, and academic achievement. *Journal of Educational Psychology*, 104, 700–712.
- Robers, S., Zhang, J., Truman, J., & Snyder, T. D. (2010). *Indicators of school crime and safety*. Retrieved from <http://nces.ed.gov/pubs2011/2011002>.
- Rossi, M., Beilke, L. & Barreto, F. (2017) .Microbial contamination and good manufacturing practices in school kitchen. *Journal of food safety*, 38 (1) 17-25
- Sango, M. G., & Chiinze, M.M. (2015). Child abuse and its effects on teaching and learning in Mutare, Zimbabwe. *Case Studies Journal*, 4 (1), 72-96.
- Saunders, M., Lewis, P., & Thornhill, A. (2000). *Research methods for business students* (2nd ed.). Birmingham: Pearson Education Ltd.
- Schneider, S. (2002). School violence in children and adolescents: A meta- analysis of properness. *Journal of School Violence*, 1, 5-34.
- Scott, C. A. (2001). Going home with the chaps: concerning the degradation of young urbanites and their social space and time. *Youth and Policy*, 69, 17 - 41.
- Scott, T. M., Gagnon, J.C., & Nelson, C.M. (2008). School-wide systems of positive behaviour support: A framework for reducing school crime and violence. *Journal of Behavior Analysis of Offender and Victim Treatment and Prevention*, 1(3), 259-272.
- 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.
- Siringi, S (2001). Is there recourse in Law for Parents? *The Daily Nation*, p.5.
- Silverman, D. (2000). *Doing qualitative research. A practical handbook*. London: Sage.
- Sprietsma, M. (2012). Computers as pedagogical tools in Brazil: A pseudo-panel analysis. *Education Economics*, 20 (1), 19-32.

- Stephens, R. D. (1995). *Safe schools: A handbook for violence prevention*. Bloomington: National Educational Service Press.
- Stone, N. J. (2001). Designing effective study environments. *Journal of Environmental Psychology*, 21 (2), 179-190.
- Squelch, J. (2001). Do school governing bodies have a duty to create safe schools? An educational law perspective. *Perspectives in Education*, 19, 137-149.
- Suskie, L. A. (1996). *Questionnaire survey research: What works* (2nd ed.). Florida State University, Tallahassee, FL: Association for Institutional Research Resources for Institutional Research.
- Suraya, W.N., & Yunus, J.N. (2013). School cultural and academic achievement in secondary schools of Perak: An exploratory outlook. *Malaysian Journal of Research*, 1 (1), 37-43.
- Suryadarma, D., Asep, S., Sudarno, S., & Rogers, F.H. (2006). Improving student performance in public primary schools in developing countries: Evidence from Indonesia. *Education Economics*, 14 (4), 401-429.
- Swanson, M.C. (2005). *Interview with Michael Shaughnessy about (AVID): Advancement via individual determination*. Retrieved from: <http://www.ednews.org/articles/392/1>
- Teachers Service Commission (2005). *Teacher recruitment guidelines*. Nairobi: Government Printer.
- Tesch, R.C. (1990). *Qualitative research. Analysis types and software tools*. New York: The Falmer Press.
- Trinies, V., Chang, H, Garn, J. & Freeman, C. (2016). The Impact of a School-Based Water, Sanitation, and Hygiene Program on Absenteeism, Diarrhea, and Respiratory Infection: A Matched–Control Trial in Mali. *The American Journal of Tropical medicine and Health*, 17(3), 380-391.
- Trochim, W.M.K. (2006). *Research methods knowledge base*. Retrieved from <http://www.socialresearchmethods.net/kb/reotypes.php>
- UNESCO (2011). *Education for all globe monitoring report: Armed conflict and education. Gender overview*. Paris: UNESCO.
- UNESCO (2015). *Rethinking education: Towards a common global good?* Paris: UNESCO.

- UNESCO (2017). *School safety manual: Tool for teachers. International Institute for capacity building in Africa*. Paris: UNESCO
- UNICEF (2016). *Children from all walks of life endure violence and millions are at risk*. Retrieved from <https://data.unicef.org/topic/child-protection/violence.htm>
- Uy, M. (2011). The status of chemical safety and security in Universities in Mindanao, Philippines. *Journal of Chemical Health and Safety*, 18 (6), 8–14.
- Walton, G. (2005). Bullying widespread: A critical analysis of research and public discourse on bullying. *Journal of School Violence*, 4(1), 91-118.
- Waudu, D. J. (2009). *Proper implementation of Ministry of Education guidelines for free primary education in Lugari District, Western Province Kenya* (Master's thesis), University of Nairobi, Kenya.
- Wanzala, O. (2017). Many die as disaster reporter gathers dust. Sunday nation. P 3
- Werle, G. (2006). Taking steps to promote safer schools. *Journal of School Health*, 76(4), 156-158.
- Wexelbaum, R. (2015). Censorship of online LGBTIQ content in libraries. In R. Wexelbaum (Ed.) *Queers Online: LGBTIQ Digital Practices in Libraries, Archives, and Museums*. Duluth, MN: Library Juice Press.
- Wexelbaum, S. (2017). *The library as a safe space*. Minnesota, Saint Cloud state university. Faculty library publications.
- Wortham, S. C., & Frost, J. L. (1990). *Playgrounds for young children: National survey and perspectives*. Reston, V. A: American Alliance for Health, Physical Education, Recreation and Dance.
- Zhao, M., & Glewwe, P. (2010). What determines basic school attainment in developing countries? Evidence from rural China. *Economics of Education Review*, 29 (3), 451-460.

APPENDICES

APPENDIX I

PRINCIPAL'S QUESTIONNAIRE ON SCHOOL SAFETY

INFLUENCES ON TEACHING AND LEARNING PROCESSES

Introduction

I am a student at Kenyatta University. In fulfillment of requirements for the award of Doctorate Degree, I am required to conduct a research and write a thesis report. My study is on School Safety and Its influence on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties, Kenya.

Kindly respond to the questionnaire with honesty in order to facilitate this study. Your identity will be kept confidential. Do not write your name in this questionnaire. Thank you for taking time to support this study

Instructions

Please put a tick (✓) against your responses. Where explanation is required, use spaces provided.

Part 1: Background Information

Introduction

This section requires you to give information with regard to your gender, working experience, duration you have worked in the current station, academic qualification and the county the school is located.

1. Indicate your Gender.

Male () Female ()

2. Indicate your experience (in years) as a Principal

1-4 () 5-8 () 9-12 ()

13-16 () 17-20 () Above 20 ()

3. For how long have you worked as a principal (in years) at the current school?
 1-5 () 6-10 () 11-15 () 16-20 ()
 21-25 () Above 25 ()

4. Which is your highest academic qualification?
 PhD () M.Ed () B. Ed ()
 Any other, specify.....

5. Indicate the county in which the school is located.....

Part 2: Status of School Safety

Introduction

This section requires you to give your views with regard to;

a) School’s physical infrastructure safety: This includes safety of Classrooms, Dormitories, Dining halls, Kitchens, Laboratories, Libraries, Toilets and Playgrounds.

b) School social environment safety: This includes School Safety on: Alcohol, drug and Substance Abuse, Child Abuse and Safety of children with Special need

a) School’s physical infrastructure safety

6. Classroom safety

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Classrooms are large enough to accommodate 40 students comfortably					
2	Classrooms are well ventilated to allow proper air circulation					
3	Classroom windows and doors have grills					
4	Classroom doors and windows open outwards					
5	Furniture in the classrooms is appropriate					
6	Classrooms are clean and well maintained					

7. Dormitory safety

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	There is enough space between the beds in the Dormitories					
2	Dormitories are well ventilated to allow air circulation					
3	Dormitories have two exits and an emergency exit in the middle					
4	Triple deckers are not found in the dormitories					
5	Dormitory doors open outwards					
6	There are fire extinguishers in the dormitories					
7	Dormitories are clean and well maintained					

8. Dining hall and kitchen safety

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Dining Halls are spacious to accommodate students comfortably					
2	Dining halls are clean and well maintained					
3	Dining hall has appropriate Furniture					
4	School kitchen is large enough for the staff to work comfortably					
5	There is proper storage of food such as stores and raised shelves, etc					
6	Kitchen is clean and well maintained					

9. Laboratory and Library safety

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	School laboratories are spacious enough for students to learn safely					
2	Laboratories have appropriate furniture					
3	There are rooms with cupboards for storage of chemicals					
4	There are proper firefighting facilities in the laboratories					
5	Laboratories assistants are trained					
6	School libraries is large enough to accommodate students at one given time					
7	Libraries are well ventilated					
8	School library is well equipped with relevant learning materials					

10. Toilets and Playground safety

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Toilets are adequate for students (1:7-one toilet for seven students)					
2	There are clearly designated Toilets for girls and boys					
3	Toilets are clean and well maintained					
4	There is a playground large enough for all sports					
5	Playgrounds are well leveled					
6	Grass is kept short in the playgrounds					
7	Playgrounds are free of dangerous items					
8	There is a secure and well-guarded school gate					
9	A perimeter fence has been put around the School					

b) School social environment safety

11. School safety in regard to Alcohol, drug and Substance Abuse

Kindly tick (✓) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Students are enlightened about Alcohol, drug and Substance Abuse(ADA) during teaching					
2	Official ADA fighting agencies such as NACADA are invited to talk to students					
3	Learners discuss and suggest ways that can contribute to creating a drug free school environment					
4	Students properly display magazines and newspaper articles on ADA					
5	There are forums for students to narrate their experiences of what they see in their neighborhood related to ADA					
6	Students are educated on how to resist negative peer pressure					
7	Parents are involved in the fight against ADA					
8	There are no shops around schools from where students can access Alcohol, drugs and other substances					
9	The school cooperates with law enforcers and other community members to fight ADA					
10	There are guidance and counseling services to deal with ADA cases					
11	Students are given adequate pastoral care					
12	There are rehabilitation programmes to deal with ADA					

12. School safety in regard to Child Abuse

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Teachers are able to identify children who have been subjected to child abuse					
2	Child abuse cases are reported to relevant authorities such as police and children's department					
3	Students are enlightened on how to identify a person with wrong intention					
4	Students are encouraged to report an act of indecent behaviour meted on them by anyone					
5	Students are discouraged from accepting any inducement from strangers					
6	Parents are sensitized on issues regarding child abuse					
7	Students who pass through secluded places are encouraged to walk in groups					
8	Students are advised to scream or otherwise if they find themselves in a dangerous situation					
9	Students are advised not to give strangers any information regarding them or their families					
10	There are guidance and counselling programmes for children who have undergone forms of child abuse					
11	There are strategies in place to rescue children from different forms of abuse					
12	Teachers organize remedial classes for children suffering different forms of abuse					

13. Safety of children with Special needs

Kindly tick (✓) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	There are access paths provided for children with special needs					
2	There are ramps to enable children with special needs access facilities within the buildings					
3	Teaching and learning environment is responsive to the needs of children with special needs					
4	Parents and community are sensitized to take children with special needs to school					
5	There are strategies for early identification of children with special needs					
6	Guidance and counseling programmes for children with special needs are available					
7	Teachers are well trained to cater for children with special needs					
8	There is no bullying of children with special needs in your school					

Part 3:

This section requires you to give your views on how safety of physical infrastructure and social environment affects teaching and learning processes in your school.

Influences of school safety on teaching and learning process

(i) Safety of Physical infrastructure

14. Suggest how safety of classrooms influences teaching and learning processes in your school

.....

15. Explain how safety of dormitories influences teaching and learning processes in your school.....
.....

16. Explain how safety of Dining hall influences teaching and learning processes in your school.....
.....

17. Explain how safety of Kitchen influences teaching and learning processes in your school.....
.....

18. Explain how safety of laboratories influences teaching and learning processes in your school.....
.....

19. Explain how safety of libraries influences teaching and learning processes in your school.....
.....

20. Explain how safety of toilets influences teaching and learning processes in your school.....
.....

21. Explain how safety of play grounds influences teaching and learning processes in your school.....
.....

ii) Safety of school's social environment

22. How can cases of Alcohol, Drugs and Substance Abuse influences teaching and learning processes.....
.....

23. Comment on how cases of Child Abuse can influence teaching and learning processes in your school.....

.....
.....

24. How does safety of children with special needs influence teaching and learning processes in your school?.....

.....
.....

Part 4: Suggestions on ways to enhance school safety to promote teaching and learning process in the schools.

This section requires you to give your suggestions on ways to enhance school safety to promote teaching and learning process in the schools.

25. Give suggestions on ways schools can enhance safety to promote teaching and learning process.....

.....

Thank you for your cooperation

APPENDIX II

DEPUTY PRINCIPAL'S QUESTIONNAIRE ON SCHOOL SAFETY INFLUENCES ON TEACHING AND LEARNING PROCESSES

I am a student at Kenyatta University. In fulfillment of requirements for the award of Doctorate Degree, I am required to conduct a research and write a thesis report. My study is on School Safety and Its influence on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties, Kenya.

Kindly respond to the questionnaire with honesty in order to facilitate this study. Your identity will be kept confidential. Do not write your name in this questionnaire. Thank you for taking time to support this study

Instructions

Please put a tick (√) against your responses as requested. Where explanation is required, use spaces provided.

Part 1: Background Information

Introduction

This section requires you to give information with regard to your gender, working experience, duration you have worked in the current station, academic qualification and the county the school is located.

1. Indicate your Gender Male () Female ()

2. Indicate your experience (in years) as a Deputy Principal
1-4 () 5-8 () 9-12 ()
13-16 () 17-20 () Above 20 ()

3. For how long have you worked (in years) at the current school?
1-5 () 6-10 () 11-15 ()
16-20 () 21-25 () Above 25 ()

4. Which is your highest academic qualification?
 PhD () M.Ed () B. Ed ()
 Any other, specify.....
5. Indicate the county in which the school is located.....

Part 2: Status of School Safety

Introduction

This section requires you to give your views with regard to;

- a) School’s physical infrastructure safety:** This includes safety of Classrooms, Dormitories, Dining halls, Kitchens, Laboratories, Libraries, Toilets and Playgrounds.
- b) School social environment safety:** This includes School Safety on: Alcohol, drug and Substance Abuse, Child Abuse and Safety of children with Special nee

a) School’s physical infrastructure safety

6. Classroom safety

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Classrooms are large enough to accommodate 40 students comfortably					
2	Classrooms are well ventilated to allow proper air circulation					
3	Classroom windows and doors have grills					
4	Classroom doors and windows open outwards					
5	Furniture in the classrooms is appropriate					
6	Classrooms are clean and well maintained					

7. Dormitory safety

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	There is enough space between the beds in the Dormitories					
2	Dormitories are well ventilated to allow air circulation					
3	Dormitories have two exits and an emergency exit in the middle					
4	Triple deckers are not found in the dormitories					
5	Dormitory doors open outwards					
6	There are fire extinguishers in the dormitories					
7	Dormitories are clean and well maintained					

8. Dining hall and kitchen safety

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Dining Halls are spacious to accommodate students comfortably					
2	Dining halls are clean and well maintained					
3	Dining hall has appropriate Furniture					
4	School kitchen is large enough for the staff to work comfortably					
5	There is proper storage of food such as stores and raised shelves, etc					
6	Kitchen is clean and well maintained					

9. Laboratory and Library safety

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	School laboratories are spacious enough for students to learn safely					
2	Laboratories have appropriate furniture					
3	There are rooms with cupboards for storage of chemicals					
4	There are proper firefighting facilities in the laboratories					
5	Laboratories assistants are trained					
6	School libraries is large enough to accommodate students at one given time					
7	Libraries are well ventilated					
8	School library is well equipped with relevant learning materials					

10. Toilets and Playground safety

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Toilets are adequate for students (1:7-one toilet for seven students)					
2	There are clearly designated Toilets for girls and boys					
3	Toilets are clean and well maintained					
4	There is a playground large enough for all sports					
5	Playgrounds are well leveled					
6	Grass is kept short in the playgrounds					
7	Playgrounds are free of dangerous items					
8	There is a secure and well-guarded school gate					
9	A perimeter fence has been put around the School					

b) School social environment safety

11. School safety in regard to Alcohol, drug and Substance Abuse

Kindly tick (✓) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Students are enlightened about Alcohol, drug and Substance Abuse(ADA) during teaching					
2	Official ADA fighting agencies such as NACADA are invited to talk to students					
3	Learners discuss and suggest ways that can contribute to creating a drug free school environment					
4	Students properly display magazines and newspaper articles on ADA					
5	There are forums for students to narrate their experiences of what they see in their neighborhood related to ADA					
6	Students are educated on how to resist negative peer pressure					
7	Parents are involved in the fight against ADA					
8	There are no shops around schools from where students can access Alcohol, drugs and other substances					
9	The school cooperates with law enforcers and other community members to fight ADA					
10	There are guidance and counseling services to deal with ADA cases					
11	Students are given adequate pastoral care to deter them from engaging in harmful practices					
12	There are rehabilitation programmes in place for students with ADA problems					

12. School safety in regard to Child Abuse

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Teachers are able to identify children who have been subjected to child abuse					
2	Child abuse cases are reported to relevant authorities such as police and children's department					
3	Students are enlightened on how to identify a person with wrong intention					
4	Students are encouraged to report an act of indecent behaviour meted on them by anyone					
5	Students are discouraged from accepting any inducement from strangers					
6	Parents are sensitized on issues regarding child abuse					
7	Students who pass through secluded places are encouraged to walk in groups					
8	Students are advised to scream or otherwise if they find themselves in a dangerous situation					
9	Students are advised not to give strangers any information regarding them or their families					
10	There are guidance and counselling programmes for children who have undergone forms of child abuse					
11	There are strategies in place to rescue children from different forms of abuse					
12	Teachers organize remedial classes for children suffering different forms of abuse					

13. Safety of children with Special needs

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	There are access paths provided for children with special needs					
2	There are ramps to enable children with special needs access facilities within the buildings					
3	Teaching and learning environment is responsive to the needs of children with special needs					
4	Parents and community are sensitized to take children with special needs to school					
5	There are strategies for early identification of children with special needs					
6	Guidance and counseling programmes for children with special needs are available					
7	Teachers are well trained to cater for children with special needs					
8	There is no bullying of children with special needs in your school					

Part 3:

This section requires you to give your views on how safety of physical infrastructure and social environment affects teaching and learning processes in your school.

Influences of school safety on teaching and learning process

i) Safety of Physical infrastructure

This section requires you to give your views on the influences of School Safety on teaching and learning process.

14. Suggest how safety of classrooms influences teaching and learning processes in your school.....
.....
15. Explain how safety of dormitories influences teaching and learning processes in your school.....
.....
16. Explain how safety of Dining hall influences teaching and learning processes in your school.....
.....
17. Explain how safety of Kitchen influences teaching and learning processes in your school.....
.....
18. Explain how safety of laboratories influences teaching and learning processes in your school.....
.....
19. Explain how safety of libraries influences teaching and learning processes in your school.....
.....
20. Explain how safety of toilets influences teaching and learning processes in your school.....
.....
21. Explain how safety of play grounds influences teaching and learning processes in your school.....
.....

ii) Safety of school's social environment

22. How can cases of Alcohol, Drugs and Substance Abuse influences teaching and learning processes.....
.....

23. Comment on how cases of Child Abuse can influence teaching and learning processes in your school.....
.....

24. How can safety of children with special needs influences teaching and learning processes in your school?.....
.....
.....

Part 4: Part 4: Suggestions on ways to enhance school safety to promote teaching and learning process in the schools.

This section requires you to give your suggestions on ways to enhance school safety to promote teaching and learning process in the schools.

25. Give suggestions on ways schools can enhance safety to promote teaching and learning process.....
.....
.....

Thank you for your cooperation

APPENDIX III

STUDENTS' QUESTIONNAIRE ON SCHOOL SAFETY

INFLUENCES ON TEACHING AND LEARNING PROCESSES

I am a student at Kenyatta University. In fulfillment of requirements for the award of Doctorate Degree, I am required to conduct a research and write a thesis report. My study is on School Safety and Its influence on Teaching and Learning Processes in Public Secondary Schools in Nairobi and Nyeri Counties, Kenya.

Kindly respond to the questionnaire with honesty in order to facilitate this study. Your identity will be kept confidential. Do not write your name in this questionnaire. Thank you for taking time to support this study

Instructions

Please put a tick (✓) in the bracket in front of your responses as requested. Where explanation is required, use spaces provided.

Part 1: Background Information

Introduction

This section requires you to give information with regard to your gender, age, school type, the county the school is located and your form (class).

1. Indicate your Gender Male () Female ()
2. Indicate your age in one of the following age brackets
14-16 () 17-18 () Above 18 ()
3. Indicate the type of your school.
Boys' boarding () Girls 'boarding () Mixed school ()
4. Which county is your school located?
5. Indicate your form (class).....

Part 2: Status of School Safety

Introduction

This section requires you to give your views with regard to;

- a) **School's physical infrastructure safety:** This includes safety of Classrooms, Dormitories, Dining halls, Kitchens, Laboratories, Libraries, Toilets and Playgrounds.
- b) **School social environment safety:** This includes School Safety on: Health and Hygiene, Alcohol, drug and Substance Abuse, Child Abuse and Safety of children with Special need

a) School's physical infrastructure safety

6. Classroom safety

Kindly tick (✓) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Classrooms are large enough to accommodate 40 students comfortably					
2	Classrooms are well ventilated to allow proper air circulation					
3	Classroom windows and doors have grills					
4	Classroom doors and windows open outwards					
5	Furniture in the classrooms is appropriate					
6	Classrooms are clean and well maintained					

7. Dormitory safety

Kindly tick (✓) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	There is enough space between the beds in the Dormitories					
2	Dormitories are well ventilated to allow air circulation					
3	Dormitories have two exits and an emergency exit in the middle					
4	Triple decker are not found in the dormitories					
5	Dormitory doors open outwards					
6	There are fire extinguishers in the dormitories					
7	Dormitories are clean and well maintained					

8. Dining hall and kitchen safety

Kindly tick (✓) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Dining Halls are spacious to accommodate students comfortably					
2	Dining halls are clean and well maintained					
3	Dining hall has appropriate Furniture					
4	School kitchen is large enough for the staff to work comfortably					
5	There is proper storage of food such as stores and raised shelves, etc					
6	Kitchen is clean and well maintained					

9. Laboratory and Library safety

Kindly tick (✓) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	School laboratories are spacious enough for students to learn safely					
2	Laboratories have appropriate furniture					
3	There are rooms with cupboards for storage of chemicals					
4	There are proper firefighting facilities in the laboratories					
5	Laboratories assistants are trained					
6	School libraries is large enough to accommodate students at one given time					
7	Libraries are well ventilated					
8	School library is well equipped with relevant learning materials					

10. Toilets and Playground safety

Kindly tick (✓) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Toilets are adequate for students (1:7-one toilet for seven students)					
2	There are clearly designated Toilets for girls and boys					
3	Toilets are clean and well maintained					
4	There is a playground large enough for all sports					
5	Playgrounds are well leveled					
6	Grass is kept short in the playgrounds					
7	Playgrounds are free of dangerous items					
8	There is a secure and well-guarded school gate					
9	A perimeter fence has been put around the School					

b) School social environment safety

11. School safety in regard to Alcohol, drug and Substance Abuse

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Students are enlightened about Alcohol, drug and Substance Abuse(ADA) during teaching					
2	Official ADA fighting agencies such as NACADA are invited to talk to students					
3	Learners discuss and suggest ways that can contribute to creating a drug free school environment					
4	Students properly display magazines and newspaper articles on ADA					
5	There are forums for students to narrate their experiences of what they see in their neighborhood related to ADA					
6	Students are educated on how to resist negative peer pressure					
7	Parents are involved in the fight against ADA					
8	There are no shops around schools from where students can access Alcohol, drugs and other substances					
9	The school cooperates with law enforcers and other community members to fight ADA					
10	There are guidance and counseling services to deal with ADA cases					
11	Students are given adequate pastoral care to deter them from engaging in harmful practices					
12	There are rehabilitation programmes in place for students with ADA problems					

12. School safety in regard to Child Abuse

Kindly tick (√) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	Teachers are able to identify children who have been subjected to child abuse					
2	Child abuse cases are reported to relevant authorities such as police and children's department					
3	Students are enlightened on how to identify a person with wrong intention					
4	Students are encouraged to report an act of indecent behaviour meted on them by anyone					
5	Students are discouraged from accepting any inducement from strangers					
6	Parents are sensitized on issues regarding child abuse					
7	Students who pass through secluded places are encouraged to walk in groups					
8	Students are advised to scream or otherwise if they find themselves in a dangerous situation					
9	Students are advised not to give strangers any information regarding them or their families					
10	There are guidance and counselling programmes for children who have undergone forms of child abuse					
11	There are strategies in place to rescue children from different forms of abuse					
12	Teachers organize remedial classes for children suffering different forms of abuse					

13. Safety of children with Special needs

Kindly tick (✓) against your response; **SD- Strongly Disagree; D- Disagree; NS- Not Sure; A- Agree; SA- Strongly Agree**

S/NO	STATEMENT	SA	A	NS	D	SD
1	There are access paths provided for children with special needs					
2	There are ramps to enable children with special needs access facilities within the buildings					
3	Teaching and learning environment is responsive to the needs of children with special needs					
4	Parents and community are sensitized to take children with special needs to school					
5	There are strategies for early identification of children with special needs					
6	Guidance and counseling programmes for children with special needs are available					
7	Teachers are well trained to cater for children with special needs					
8	There is no bullying of children with special needs in your school					

Part 3:

Introduction

This section requires you to give your views on how safety of physical infrastructure and social environment affects teaching and learning processes in your school.

Influence of school safety on teaching and learning process

i) Safety of Physical infrastructure

14. Suggest how safety of classrooms influences teaching and learning processes in your school.....

.....

15. Explain how safety of dormitories influences teaching and learning processes in your school.....
.....

16. Explain how safety of Dining hall influences teaching and learning processes in your school.....
.....

17. Explain how safety of Kitchen influences teaching and learning processes in your school.....
.....

18. Explain how safety of laboratories influences teaching and learning processes in your school.....
.....

19. Explain how safety of libraries influences teaching and learning processes in your school.....
.....

20. Explain how safety of toilets influences teaching and learning processes in your school.....
.....

21. Explain how safety of play grounds influences teaching and learning processes in your school.....
.....

ii) Safety of school's social environment

22. How can cases of Alcohol, Drugs and Substance Abuse influences teaching and learning processes.....
.....
.....

23. Comment on how cases of Child Abuse can influence teaching and learning processes in your school.....
.....

24. How can safety of children with special needs influence teaching and learning processes in your school?.....
.....

Part 4: Suggestions on ways to enhance school safety to promote teaching and learning process in the schools.

Schools

This section requires you to give your suggestions on ways to enhance school safety to promote teaching and learning process in the schools.

25. Give suggestions on ways schools can enhance safety to promote teaching and learning process.....
.....
.....

Thank you for your cooperation

APPENDIX IV

INTERVIEW GUIDE ON SCHOOL SAFETY INFLUENCE ON TEACHING AND LEARNING PROCESSES FOR COUNTY QUALITY ASSURANCE AND STANDARDS OFFICERS

Introduction

I am a student at Kenyatta University. In fulfillment for the award of Doctorate Degree, I am required to conduct a research and write a report. The purpose of this interview is to collect data on School Safety and its influence on the teaching and learning processes in Public Secondary Schools in Nairobi and Nyeri Counties, Kenya.

Instructions

This interview guide is divided into four parts, part 1 will provide data on background information and part 2 will provide data on the status of School Safety, part 3 on the influence of school safety on teaching and learning processes and part 4 on the measures that can influence teaching and learning processes in the schools under study.

You are kindly requested to provide answers to the questions as honestly and precisely as possible. The researcher assures you that no names of the school and the respondents mentioned will be used in the publication of this research and the information gathered will be treated with ultimate confidentiality and only for the purpose of the study.

Part I: Background Information

Introduction

This section requires you to give information with regard to your academic qualification, working experience, the country the school is located and number of years you have worked in the current station.

1. Highest Level of Education

PhD () Masters ()

Degree () Diploma ()

Any other.....

2. Working Experience

5 years and below () 6-10 Years () 11-15 years

16 years and above ()

3. County.....

4. How long have you worked in the current County?

.....

Part 2: Status of School Safety

Introduction

This section requires you to give your views with regard to;

a) **School's physical infrastructure safety:** This includes safety of Classrooms, Dormitories, Dining halls, Kitchens, Laboratories, Libraries, Toilets and Playgrounds.

b) **School social environment safety:** This includes School Safety on: Alcohol, drug and Substance Abuse, Child Abuse and Safety of children with Special need

(i) Safety Status of School physical infrastructure

5. In your own words, how can you describe the safety status of the following physical infrastructure in the schools under your jurisdiction? Classrooms, Dormitories, Dining halls, Kitchens, laboratories, libraries, toilets and Playgrounds?

(ii) Safety status of school's social environment

6. Comment on the safety of the following issues in the schools in your area; Child Abuse, Alcohol and Drug Abuse and Children with special needs.

Part of 3:

Introduction

This section requires you to give your views on how safety of physical infrastructure and social environment influences teaching and learning processes in the schools under your jurisdiction.

Influence of Physical infrastructure and social environment safety on the teaching and learning processes

i) Physical infrastructure safety

7. Explain how safety of the following physical infrastructure safety influences teaching and learning process in the schools under your jurisdiction; Classrooms, Dormitories, Dining hall, Kitchen, laboratories, libraries, toilets and Playgrounds.

ii) Social Environment safety

8. Comment on how the following social environment issues influence teaching and learning process in the schools in your County: Child Abuse, Alcohol and Drug Abuse and Children with special needs.

Part 4:

Introduction

This section requires you to give your views on ways to improve school safety in order to influence teaching and learning process in schools in your county.

Suggestions from respondents on school safety that may influence teaching and learning process in the schools.

9. In your opinion, what suggestions would you give to enhance school safety in order to improve teaching and learning process in the schools in your County?

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

Thank you for your cooperation.

APPENDIX V

OBSERVATION GUIDE ON THE STATUS OF SCHOOL

SAFETY INFLUENCE ON TEACHING AND LEARNING

PROCESSES

Indicate using a (√) how the following issues concerning school safety have been addressed and give your comments on the safety status, on the comments' column.

Observation will be made based on the following criteria.

N- Has not been addressed: I-In progress: C-Has been completed.

S/NO	STATEMENT	N	I	C	Comments
1	Classrooms are large enough to accommodate 40 students comfortably				
2	Classrooms are well ventilated to allow proper air circulation				
3	Classroom windows and doors have grills				
4	Classroom doors and windows open towards outwards				
5	Furniture in the classrooms is appropriate				
6	Classrooms are clean and well maintained				
7	There is enough space between the beds in the Dormitories				
8	Dormitories are well ventilated to allow air circulation				
9	Dormitories have two exits and an emergency exit in the middle				
10	Triple deckers are not found in the dormitories				
11	Dormitory doors open outwards				
12	There are fire extinguishers in the dormitories				
13	Dormitories are clean and well maintained				
14	Dining Halls are spacious to accommodate students comfortably				

15	Dining halls are clean and well maintained				
16	Dining hall has appropriate Furniture				
17	School kitchen is large enough for the staff to work comfortably				
18	There is proper storage of food (presence of raised shelves)				
19	Kitchen is clean and well maintained				
20	School laboratories are spacious enough for students to learn safely				
21	Laboratories have appropriate furniture				
22	There is proper storage of chemicals (presence of rooms with cupboards)				
23	There are proper firefighting facilities in the laboratories (functioning ones)				
24	Laboratories assistants are trained				
25	School libraries is large enough to accommodate students at one given time				
26	Libraries are well ventilated				
27	School library is well equipped with relevant learning materials (with catalogue)				
28	Toilets are adequate for students (ratio of 1:7)				
29	There are clearly designated Toilets for girls and boys				
30	Toilets are clean and well maintained				
31	There is a playground large enough for all sports (clearly marked)				
32	Playgrounds are well leveled				
33	Grass is kept short in the playgrounds				
34	Playgrounds are free of dangerous items				
35	There is a secure and well-guarded school gate (with a security office)				
36	A perimeter fence has been put around the School (permanent or live fence)				

APPENDIX VI

INFORMED CONSENT PARTICIPANT/GUARDIAN FORM

Please consider this information carefully before deciding whether to participate in this research.

Purpose of the research: To determine the status of school safety and its influence on teaching and learning processes.

What you will do in this research: You are kindly requested to provide answers to the questions as honestly and precisely as possible. The researcher assures you that no names of the school and the respondents will be used in the publication of this research and the information gathered will be treated with ultimate confidentiality and only for the purpose of the study.

Time required: Participation will take approximately 60 minutes to complete.

Risks: There are no known risks if you decide to participate in this research study, nor are there any costs for participating in the study.

Benefits: The information you provide will help me understand how best to improve status of school safety for teaching and learning processes. The information collected may not benefit you directly, but what I learn from this study should provide general benefits to school administrators, policy makers, teachers, students and the entire stakeholders, as well as other researchers.

Confidentiality: The researcher assures you that no names of the school and the respondents will be used in the publication of this research and the information gathered will be treated with ultimate confidentiality and only for the purpose of the study.

Participation and withdrawal: Your participation in this study is completely voluntary, and you may withdraw at any time without penalty. You may withdraw by informing the researcher that you no longer wish to participate (no questions will be asked).

Agreement:

The nature and purpose of this research have been sufficiently explained and I agree to participate in this study. I understand that I am free to withdraw at any time without incurring any penalty.

Signature: _____ Date: _____

Name _____

Thank you for your cooperation

APPENDIX VII

TABLE FOR DETERMINING SAMPLE SIZE

Table for Determining Sample Size for a Finite Population

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

APPENDIX VIII

RESEARCH AUTHORIZATION LETTER



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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NAIROBI-KENYA

Ref: No.

Date:

16th September, 2015

NACOSTI/P/15/4414/7871


Wanderi Anne Njoki
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *“School safety and its effect on teaching and learning processes in public secondary schools in Nairobi and Nyeri Counties, Kenya”* I am pleased to inform you that you have been authorized to undertake research in **Nairobi and Nyeri Counties** for a period ending **15th September, 2016**.

You are advised to report to **the County Commissioners and the County Directors of Education, Nairobi and Nyeri Counties** before embarking on the research project.

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


DR. S. K. LANGAT, OGW
FOR: DIRECTOR GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.

The County Commissioner
Nyeri County.

The County Director of Education
Nyeri County.

***-APPENDIX VIX**

RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
MS. WANDERI ANNE NJOKI
of KENYATTA UNIVERSITY, 532-10106
othaya, has been permitted to conduct
research in Nairobi, Nyeri Counties

Permit No : NACOSTI/P/15/4414/7871
Date Of Issue : 16th September,2015
Fee Received :Ksh 2,000

on the topic: "SCHOOL SAFETY AND ITS
EFFECT ON TEACHING AND LEARNING
PROCESSES IN PUBLIC SECONDARY
SCHOOLS IN NAIROBI AND NYERI
COUNTIES, KENYA".



for the period ending:
15th September,2016

[Handwritten Signature]

Applicant's
Signature

[Handwritten Signature]

Director General
National Commission for Science
Technology & Innovation