

# An Investigation of Safety Precautions in Primary School Environment in Bayelsa State, Nigeria

Dr Hamilton-Ekeke, J-T

Department of Science Education, Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria

## Abstract

This research investigated the availability of safety precautions and the problems associated with safety in schools using some selected primary schools in Bayelsa State, Nigeria as case study. Consent letters and methodology of selection of participants were sent to schools to solicit willingness to be involved in the study. The population of the study comprises of 631 primary school teachers teaching in the 62 primary schools in a Local Education Authority in Bayelsa State. 210 out of the 631 teachers were randomly selected using the staff nominal roll and selecting every 5<sup>th</sup> name. The design of the study was a descriptive survey design. Four research questions were posited for the study ranging from security measures, conditions of school buildings, sources of water supply and its availability and the likely safety problems in the participating schools. The instrument for data collection was a questionnaire developed by the researcher and validated by experts in measurement and evaluation. Pearson Product Moment Correlation Coefficient of 0.78 was realized using test retest method of testing reliability. The findings revealed that there are no security measures in place in the participating primary schools. Most of the school buildings are dilapidated and the classrooms furniture are death traps. The finding of this study shows a gross neglect of safety in the school. Also, there are no regular visitations by the ministry of education to schools to ascertain the nature of safety precautions in the schools. It was therefore recommended that safety measures should be put in place for staff and pupils safety. Such safety measures should be in the form of installation of surveillance cameras in strategic places, provision of firefighting equipments, engaging professional security personnel among others.

**Keywords:** Safety, precaution, primary school, Nigeria, school environment

## 1. Introduction

The importance of safety cannot be over emphasized. It is one of the basic needs of human beings. Once a person's physiological needs are satisfied, their safety needs take precedence and dominate behaviour. Safety and security needs ranges from personal security, financial security, health and well being, safety against accidents/illness and their adverse impacts (Maslow, 1954).

Safety according to Ukeje (1992) is a condition or a state of being, which result from modification of human behaviour and or designing of the environment in other to reduce the possibility of hazards thereby reducing accidents. School safety is a paramount human concern that every school and community must take seriously and strive continually to achieve. It is also a legal concern as schools can be held liable if they do not make good effort to provide a safe and secure school environment (Hamilton-Ekeke & Rugai, 2013). This view corroborate with Syuelch, 2001 who believe that school safety should be seen as one of the top most agenda in the educational system. Safety, discipline and security are crucial issue, as school management embarks on creating safe and secure school environment (Mathe, 2008). Children are more prone to accidents and in fact they need more protection than adults do (Prinsloo, 2005).

Children deserve safe schools and it is important for scholars and staff members to feel safe and secure at school as well as going to and coming from school (Stephens, 2004). Safe school is welcoming, conducive for learners and teachers, free from intimidation, harm or danger, violence, harassment or humiliation (Stephens, 1998, Prinsloo, 2005). Safety precautions in schools involve so many things like been careful, obeying rules and regulations, reading meaning to sign post and labels on chemicals, laboratory equipment, wearing safety gadgets, having fire extinguisher in classrooms and laboratory, observing road signs and highway code, etc. (Olaleye, 2011). School safety also involves provision of adequate buildings, fire protection, water supply, toilet facilities, staffroom, classroom, lighting and ventilation (Ipingbemi & Aiworo, 2013). Provision of basic sanitation facilities will include availability of affordable but effective environmental health facilities, i.e. adequate portable water and school building, vector control, refuse disposal, etc. The schools should have suitable health education syllabus and activities into the school curriculum and organization of the pupils to accept responsibilities for provision and maintenance of the services and facilities (Hamilton-Ekeke, 2012).

The provision of security technologies would include circuit television (CCTV) systems such as videoing and storing of video surveillance footage whether analogue or digital, intruder alarms, metal detectors or handheld detectors, x-ray machines, card readers (Lombard & Kole, 2008).

Safety precaution should be one of the fundamental objectives of any school administrator. However, studies have shown that the environment in Nigeria is not safe due to lack of adequate and safe water supply, poor sanitation facilities, dilapidated school structures, overcrowded or unconducive classrooms (Godson,

Shendell, Brown and Sridhar, 2009). Also, previous studies revealed that these prevailing conditions have a profound negative impact on the health of school children (Hamilton-Ekeke, 2012). The provision of safety facilities or precautions would enable 1863 million days of school attendance and less diarrhea illness (WHO, 2008).

Stephens (2004) was of the opinion that no greater challenge exists today than creating safe schools and restoring schools to tranquil and safe places of learning. The challenge requires a major strategic commitment and involves placing school safety at the top of the educational agenda. Without safe schools, teachers cannot teach and students cannot learn. A safe school is foundational to the success of the academic mission. It is on this premise that the researcher finds it necessary to investigate the safety precaution in primary school environment. The concern of this research work is to examine the availability of safety precautions in selected primary schools in Bayelsa State, Nigeria. The specific objectives of the study is to examine the security measures in place in the selected primary schools; Investigate the conditions of classroom buildings; ascertain the availability and source of water in the school and identify the likely safety problems in the schools.

## 2. Research Questions

Four research questions are posited for the study:

1. What are the security measures in place in the selected primary schools in Bayelsa State?
2. What is the condition of primary schools building in Bayelsa State?
3. What is the source of water and its availability in the selected primary schools involved in the study?
4. What are the likely safety problems in the schools?

## 3. Materials and Method

The design of the study is a descriptive survey research design. The descriptive survey research involves collecting data from a representative sample of the population and then generalizing the findings to the entire population. The population of this study comprises of 631 teachers of which 329 are males and 302 are female. In addition, the population also includes 62 head teachers (39 male and 23 female) from 62 primary schools in a Local Education Authority in Bayelsa State in the South-South geo-political zone of Nigeria. The sample of the study comprises of 210 teachers randomly selected from the 631 teachers in the LEA using staff nominal roll and randomly selecting every 5<sup>th</sup> name. The technique was adopted to give the entire population of the teachers the opportunity of being selected for the study. This method of selection was included in the consent letter earlier sent to schools soliciting for participation in the research. The research proposal was also approved by the Niger Delta University Research Board before commencement. The study was carried out in the first term of 2016/2017 academic year which was September 2016 – December 2016.

The instrument used for the study was a questionnaire developed by the researcher titled 'Safety Precaution in School Questionnaire/ (SPSQ). The instrument consist of items that measures the safety precaution in schools and respondents are expected to express their opinion on a four point Likert scale of: 'Strongly agree' (SA), 'Agree' (A), 'Disagree' (D) and 'Strongly disagreed' (SD). The options were ranked as follows: SA = 4, A =3, D = 2 and SD = 1. The instrument for data collection was validated by experts in measurement and evaluation in the Faculty of Education, Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria. The corrections indicate were incorporated into the final version of the questionnaire. The test re-test method was used to ascertain the reliability of the instrument. The instrument was administered to 25 teachers outside the sampled for the main study. After the first test, the scores were recorded; the same test was re-administered after two week. The second sets of scores were also recorded. The first and the second test scores were correlated using the Pearson Product Moment Correlation Coefficient method. The result obtained from the correlation was 0.78 which is within the benchmark of reliable coefficients indicating that the instrument is reliable.

The researcher with two research assistants administered the questionnaire to the 210 teachers selected for the study but 208 were realized on retrieval; even though the instruments (questionnaires) were retrieved immediately after completion. Data were analyzed using the descriptive statistics. The scores were tabulated for easy computation on a four point scale and the median used was 2.5, any response greater than the median score of 2.5 was accepted while any response less than the median score of 2.5 was rejected.

## 4. Results

The results are analyzed to answer the various research questions as follows:

**4.1 Research Question 1:** What are the security measures in place in the selected primary schools in Bayelsa State?

**Table 1: Mean Response on Security Measures in Place**

S/NO	ITEM	SA	A	D	SD	X	Remark
1	There are installed surveillance cameras.	0	0	95	113	1.45	
2	There are firefighting equipments.	0	22	78	108	1.58	Disagree
3	There are teachers in charge of school safety.	8	9	99	92	1.67	Disagree
4	There are hired security personnel from reliable security firm.	0	0	88	120	1.42	Disagree
<b>Grand Mean Score</b>						<b>1.53</b>	<b>Disagree</b>

Source: Field work 2016 Cut-off mean = 2.50 N = 208

From the above Table, the results revealed that all question items (1-4) the mean response score were below the 2.50 cut-off score indicating that there are no security measures of the investigated variable indicating security measures in the participating school for the safety of staff and pupils. In other words, there is a gross lack of surveillance cameras, no firefighting equipments, no teacher assigned to take charge of safety and security personnel are not recruited from reliable security firms. Furthermore, the Grand mean response score of 1.53 is also less than the cut-off point of 2.50 which is an indication that teachers generally disagree with the statement that there are safety measures in place in the participating primary schools.

#### 4.2 Research Question 2: What is the condition of primary schools building in Bayelsa State?

**Table 2: Mean Response on Conditions of School Building**

S/NO	ITEM	SA	A	D	SD	X	Remark
1	Staff and classroom are adequate and in good condition	47	38	70	53	2.37	Disagree
2	Chairs and tables are adequate in my school	28	60	79	41	2.36	Disagree
3	The staff rooms and classrooms are well ventilated	49	31	66	62	2.32	Disagree
4	There are regular checks and maintenance of school building.	39	69	51	49	2.47	Disagree
5	There are adequate toilet facilities in the school	43	30	53	82	2.16	Disagree
<b>Grand Mean Score</b>						<b>2.34</b>	<b>Disagree</b>

Source: Field work 2016 Cut-off mean = 2.50 N = 208

The mean response score from Table 2 for item 1 was 2.37; item 2, 2.36; item 3, 2.32, and item 4, 2.47 and they are all less than the cut-off point of 2.50 indicating that teachers disagree with conditions of the buildings in the participating primary schools. The mean response score for items 1 – 5 shows that staff rooms are inadequate, chairs and tables are also inadequate, staff rooms are not well ventilated, no adequate toilet facilities and there are no regular checks and maintenance of the school buildings. The Grand mean score is 2.34 which is also less than the cut-off point of 2.50 which shows that it was the general opinion of teachers that the condition of school building is unpleasant.

#### 4.3 Research Question 3: What is the source of water and its availability in the selected primary schools involved in the study?

**Table 3: Mean Response on Water source and Availability**

S/NO	ITEM	SA	A	D	SD	X	Remark
1	Water is sourced from stream	57	52	46	53	2.54	Agree
2	Water is sourced from well	54	47	67	40	2.55	Agree
3	Water is sourced from tap	47	46	58	57	2.39	Disagree
4	There are functional water closet in the toilets	39	69	51	49	2.47	Disagree
<b>Grand Mean Score</b>						<b>2.48</b>	<b>Disagree</b>

Source: Field work 2016 Cut-off mean = 2.50 N = 208

The mean response score from Table 3 for items 1 and 2 are greater than the cut-off point of 2.50, which is an indication that teachers agreed that the source of water is from the stream and well.

However, mean response for items 3 and 4 are 2.39 and 2.47 respectively which is an indication that there are no tap water and no water closet in the toilet. There is no point of providing toilets with water closet when water will not be connected to it for effective use. School not having a source of portable water is at high risk of water-borne diseases as well as gastro-intestinal diseases. The Grand mean response score was 2.48 which further indicated that water is not available in the participating primary Schools.

#### 4.4 Research Question 4: What are the likely safety problems in the schools?

**Table 4:** Mean Response on Likely Safety Problems in the selected Schools

S/NO	ITEM	SA	A	D	SD	X	Remark
1	Severe injury resulting from cracks and falls	52	62	45	49	2.56	Agree
2	Death or injury resulting from collapsed classroom	72	43	49	44	2.71	Agree
3	Severe sickness resulting from unsanitary toilet and unsterile water source.	55	56	49	48	2.56	Agree
4	Fire outbreak	47	42	58	53	2.32	Disagree
						<b>2.54</b>	Agree

Source: Field work 2016 Cut-off mean = 2.50 N = 208

From the above Table 4, the results revealed that for question item 1, 2, and 3 the mean response score were 2.56, 2.71 and 2.56 respectively indicating that staff and pupils are at great risk in the schools as a result of poor safety measures. However, the mean score for item 4 was 2.32 which is an indication that teachers disagreed that one of the likely safety problem in the selected school is fire outbreak, this might be because they have never has an incidence of fire. Generally, Bayelsa State being one of the core mangroves Region State of the Niger Delta wetland basin is not prone to fire outbreak due to its all year round rains.

Furthermore, the Grand mean response score of 2.54 which is greater than the cut-off point of 2.50 was also an indication that teachers generally agree that there are safety problems in the selected primary schools in Bayelsa State.

### 5. Discussion of Findings

The findings of the study indicated that staff and pupils in the participating primary schools in Bayelsa State are at risk as there are no safety measures in place in the schools. The finding of the study is in line with Alex-Hart & Nwadiuto (2011) who reported that none of the schools studied had safety patrol team, fire extinguishers and food service area. Also, response collated for research question two indicated that toilet/latrine facilities in the selected schools are not adequate; this collaborated with Mathe (2008) who reported inadequate latrine/toilet and sanitary facilities in schools in Johannesburg.

Further findings revealed that the main source of water is stream and well. Portable tap water is not available in the schools. The toilets have water closets that are not functional as there is no water source to connect them to. The grand mean score of 2.38 for research questions three shows that teachers are displeased with the source of water. This finding corroborates with Hamilton-Ekeke (2016) who carried out a study on the prevalence of communicable diseases among school-aged children and found that poor sanitary conditions of schools in Bayelsa State prone children to infectious diseases.

Response for research question five also indicated that conditions of buildings in the selected schools are not pleasing to the teachers. The grand mean score of 2.38 is less than the cut-off point which shows that the respondents generally displeased with the condition of the school buildings are most of them are in a sorry-state. This finding tally with that of Alex-Hart and Nwadiuto (2011) who found that 5% of schools in their area of study had no structure while 45% were at various stages of disrepair. The findings also corroborates with Hamilton-Ekeke & Mathew (2011) who investigated how to enhance school environment for students' learning and found out that most public schools are in deplorable conditions and not fit for learning.

Finally, on whether there are likely safety problems in the study area, analysis of data collected indicated that staff and pupils in the selected primary schools are living dangerously as there are no safety measures put in place to protect staff and pupils from accidents, hazards, infectious diseases from unsanitary toilets, injuries that may arise from cracked floors, dilapidated furniture, collapse buildings etc. This finding is in tandem with that of Oluremi (2015) who reported that 25% of primary schools in Osun State are not child friendly. These findings are more or less a true reflection of the picture of most public primary schools in Bayelsa State, Nigeria.

### 6. Conclusion

Children deserve safe schools and it is important for scholars and staff members to feel safe and secure at school as well as going to and coming from school. The finding of the study shows that government at all levels has neglected the safety of lives of head-teachers, teachers, staff and pupils in public primary school for too long. The recent kidnap of schools children from their classes in Lagos should serve as eye opener to education administrator, parents and teachers alike, hence, the need to provide basic security apparatus and to also put in place adequate security measures for both staff and pupils. Such security should include surveillance camera, firefighting equipment, clean and safe water supply and also ensure that school buildings are maintained as at when due.

### 7. Educational Implication of the Study

The findings of the study revealed that staff and pupils of public primary schools in Bayelsa State are vulnerable to danger which government at all levels need to address. The study will create awareness of the urgent need to

put safety measure in place for staff and pupils to protect them not only from violent attack but also from infections which can easily spread through unclean environment and filthy toilet. Parents by this study are now aware of the vulnerability of their wards to certain dangers in the schools and will be willing to join hands with school heads to find solution to protect pupils in the selected schools. Furthermore, stakeholders in education are now aware of the porosity to danger of most primary school in State and will be to make effort to find lasting solution.

## 8. Recommendation

The following recommendations are made with the view that if implemented, primary schools in State will be safe and secure for staff and pupils to learn:

- Safety measure should be put in place for staff and pupils of primary schools in Bayelsa State. Such safety measures should include the installations of surveillance camera in strategic places, provision of firefighting equipments, engaging professional security personnel among others;
- Government should build more latrine/toilet with water closet, in order to reduce or eradicate risk of infectious diseases among the pupils and staff;
- Government should ensure regular supervision of school buildings and facilities and carry maintenance services when necessary. This will go a long way to protect staff and pupils from the dangers of collapse building, licking roofs and dilapidated windows which can hinder smooth teaching and learning;
- School head should delegate or appoint safety teachers in all the primary schools in State that will report impending danger and how to nip it in the bud. This will serve as proactive measure rather than wait for the incidence to occur.

## References

- Alex-Hart, B.A. & Nwadiuto. A. A. (2011). An Evaluation of the Health Status of the School Environment in Public Primary Schools in bonny Local Government Area, Rivers State. *The Nigerian Health Journal*, Vol. 11, No 3, 83 - 88
- Godson, R.E.E.A., Shendell, D.G., Brown, G.E. & Sridhar, M.K.C. (2009). Assessment of Noise and Associated Health Impacts at Selected Secondary Schools in Ibadan, Nigeria, *Journal of Environmental and Public Health*, Article ID 739502, 6 pages <http://dx.doi.org/10.1155/2009/739502>
- Hamilton-Ekeke, J-T & Rugai, J. (2013). Effect of learning environment on students' achievement in health education, *Asian Academic Research Journal of Multidisciplinary*, 1(14): 145-158
- Hamilton-Ekeke, J-T (2016). Reducing the prevalence of communicable diseases through Health Education, *Nigerian School Health Journal*, 28(2): 68-75
- Hamilton-Ekeke, J-T. (2012). Home environment and school learning in Nigeria, *Nigerian Journal of Education, Health and Technology Research*, 3(1): 86-93
- Hamilton-Ekeke, J-T. & Matthew, B. (2011). Improving school environment to enhance students' learning, *Nigeria Journal of Education, Health and Technology Research*, 2(1): 118-124
- Ipingbemi, O. & Aiworo, A.B. (2013). Journey to school, safety and security of school children in Benin City, Nigeria, *Transportation Research Part F: Traffic Psychology and Behaviour*, 19:77-84
- Lombaard, C. and Kole, J. (2008). *Security principles and practices, SEP111A: Units 1-10*. Pretoria: University of South Africa.
- Maslow Abraham, 1954, "Maslow's Hierarchy of Needs" – Wikipedia, accessed January 10, 2017.
- Mathe, K.S.J. 2008. *Discipline, safety and security in schools: A challenge for school management*. Johannesburg: University of Johannesburg
- Oluremi O. F. (2015). Creating a friendly School Learning Environment for Nigerian Children *European Scientific Journal* 8(8): 5-10
- Olaleye F.O (2011). Primary and Secondary Schools Administration in Nigeria Frontline Publisher Lagos.
- Prinsloo, I.J. (2005). How safe are South African schools? *South African Journal of Education*, 25(1): 5-10
- Squelch, J. (2001). Do school governing bodies have a duty to create safe schools? An education law perspective. *Perspectives in Education*, 19(4): 137-150.
- Stephens, R.D. (1998). *Safe schools planning*. New York: Cambridge University Press.
- Stephens, R.D. (2004). Preparing for safe schools. In Turk, W.L. 2004. *School crime and policing*. Upper Saddle River, New Jersey: Pearson Education, Inc.
- Ukeje, B.O (1992) "Nigerian Education, Unity within Diversity, the old within the new: in Ipaye b. (Ed) *Education in Nigeria, Past, Present and Future*, Lagos: Macmillan Nigeria Publisher Limited.
- WHO (2008). *The global burden of disease: 2004 update*. Geneva, World Health Organization ([http://www.who.int/healthinfo/global\\_burden\\_disease/GBD\\_report\\_2004update\\_full.pdf](http://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_full.pdf), accessed 26/10/2016.