

## **Repositioning Education In Nigeria Through Adequate Health Facilities: A Case Study Of Secondary Schools In Delta State**

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### **Abstract**

Education is considered to be a key instrument of human and economic transformation in all nations of the world. The effectiveness of such education depends on the decision to review the content and approaches of the present education system in Nigeria. This paper, therefore, aimed at repositioning Nigeria's education through adequate health facilities, using secondary schools in Delta State as a case study. The study adopted the descriptive survey research method. From a population of 12,266 teachers and 3,279 Principals in the government owned secondary schools in Delta State, 50 principals and 600 teachers were selected as sample. Data were collected and analysed using mean and one way Analysis of Variance (ANOVA), conducted at 0.05 level of significance. The result revealed that there is a significant difference in the mean ratings of male and female teachers on sources of drinking water in schools in Delta State. It also showed that there is no significant difference in the mean ratings of male and female teachers on availability of sanitation facilities in schools in Delta State. The findings indicated that there is a significant difference in the mean ratings of male and female teachers on method of refuse disposal in schools in Delta State. The paper recommends that government and school authorities should make effort to ensure that students have access to good source of drinking water, good sanitation facilities and device safe method of waste disposal. In fact, secondary schools could be repositioned and benefit reaped in schools in Delta State.

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**Keywords:** Education, Health Care, Health Facilities, Secondary School

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### **INTRODUCTION**

Nigerians have always realized that education is the singular factor that brings about national development. In Nigeria for instance, education was considered to be critical for the long term success of the country; whereby the country's ability to remain competitive in the knowledge-driven world is dependent on the number of trained and skilled experts the economy is able to produce [1], and this solely relies on the quality of education offered by the country. A sizeable number of contributions were made on how education could be used to achieve unprecedented transformation in every sphere of the country's social, economic and political structures. In this respect, Adegbesin [2] described education as the bedrock of every nation and a tool for nation building. By being a tool for nation building, the system (education) has to be structured to be responsive to such a worthwhile venture that is capable of transforming the country to a certain level of development in the comity of nations in his take on education, Olubadewo [3] stressed that education is of great importance to every nation and as such attracts attention at different levels.

In Nigeria, secondary education is the education a child receives after basic education and before four or five years of tertiary education. So important is this segment of the education sector because of the dual

consumer and producer roles it plays. By absorbing the products of the basic education system, it plays the consumer role and by making available students for the tertiary level of education, it plays the producer role [4]. This policy is Nigeria's strategy for the achievement of education for all (EFA). The National Policy on Education implementation guideline indicates that one of the goals of the policy is to provide a conducive learning environment in Nigeria within the shortest possible time [5].

Conducive learning environment is concerned with the provision of an environment in the school conducive or adequate for healthy living and desirable health practices. This is concerned with ensuring a clean and safe environment exemplified by the presence of good water supply, refuse disposal, sewage disposal, quality of school buildings and absence of hazards as well as vectors of disease agents [6]. Effective learning can only take place in a school that provides a healthy environment, hence the need for sustainable development through adequate health service.

### **Statement of the Problem**

Studies by scholars like Amoran, Kupoluyi, Saluko and Kupoluyi, have shown that the school environment in Nigeria is unsafe due to lack of adequate and safe water supply, poor sanitation

facilities, dilapidated, overcrowded and uncondusive classrooms [7]. These prevailing conditions have a proven negative impact on the health of school children. For instance, the World Health Organization (WHO) has estimated that between 25 to 33% of the global burden of diseases can be attributed to environmental risk factors [8]. The leading cause of death in children in low income countries are lower respiratory tract infections, malaria and diarrhea disease. It is also estimated that 88% of diarrhea disease is caused by unsafe water supply and inadequate sanitation and hygiene. Some of these diseases may have been acquired from the community or from the school environment since most of the risk factors are also prevalent both at home and at school.

In Delta State, for instance, the high level of helminthic infestations among school children has been blamed on indiscriminate disposal of human faeces due to unavailability of adequate toilet facilities, poor personal hygiene and inadequate water supply. These infestation are capable of retarding physical growth and cognitive impairment. If the aim of education must be attained, the health of school children must be improved by reducing their exposure to environmental hazards. This study seeks to ascertain ways of repositioning Nigeria's education through adequate health care, using Delta State as a case study.

#### **Purpose of the study**

The main purpose of this study is repositioning Nigeria's education through adequate health care, using Delta State as a case study. Specifically, the study will;

- i. Ascertain the sources of drinking water in schools in Delta State
- ii. Ascertain the availability of sanitation facilities in schools in Delta State
- iii. Ascertain method of refuse disposal in schools in Delta State

#### **Research Questions**

The following research questions were used for the study.

- i. What are the sources of drinking water in schools in Delta State?
- ii. Are sanitation facilities available in schools in Delta State?
- iii. What are the method of refuse disposal in schools in Delta State

#### **Hypotheses**

The study tested the following null hypotheses

- i. There is no significant difference in the mean ratings of male and female teachers on sources of drinking water in schools in Delta State

- ii. There is no significant difference in the mean ratings of male and female teachers on the availability of sanitation facilities in schools in Delta State
- iii. There is no significant difference in the mean ratings of male and female teachers on method of refuse disposal in schools in Delta State

#### **Significance of the Study**

The study is significant in a number of ways. The study is of great relevance to the government officials, state school management board, parent teachers association and the communities.

The information generated from the results of this study will help government to provide conducive environment learning environment. It will help to make changes where the impact is negative.

The findings of the study will also help the state school management to be aware of the health hazards in secondary schools and provide the management board with valid and reliable information regarding the problem associated with health issues in school management as well as provide solution to such problems. This information can guide them in the day to day performance of their responsibilities to schools under their care. It can also help them to make recommendations to government on necessary improvement in their policies.

The result of the study will provide vital information to the parent teachers association on how adequate health facilities can enhance teaching and learning. This will create awareness on the importance of adequate health facilities on the school management and will help to design strategies that will help the school to create conducive learning environment.

The findings will reveal to the communities the importance of good health facilities in their environment. This will enable the communities to promote and sustain conducive learning environment.

#### **METHODOLOGY**

This study adopted the descriptive survey research design. This is because the study aimed at describing the existing characteristics of the subjects without manipulating any variables. Delta State has 3279 secondary schools, 12,266 teachers and 3279 principals. The population of the study was all teachers and principals in Delta State. The researcher used the simple random sampling to arrive at the sample size of 650. The instrument for the study was a questionnaire titled: Repositioning Nigeria's Education through Health Facilities (RNEHF). The data collection instrument was a structured questionnaire with a reliability coefficient of 0.69. The research questions were answered using mean

and mean of means, while the hypotheses were tested using one-way analysis of variance (ANOVA) at 0.05 level of significance. A mean of 2.50 was used as a cut-off point for rejected and accepted items.

**DATA PRESENTATION/ ANALYSIS OF RESULT**

**Research Question One**

What are the sources of drinking water in schools in Delta State?

Table 1: mean and standard deviation analysis of sources of water supply

S/N	Items on sources of water supply	X	Std. Deviation	Remark
1	Borehole	3.67	0.55	Agree
2	Purchase of water in sachets	3.38	0.77	Agree
3	Unprotected water spring	3.80	0.47	Agree
4	Children brought water from their homes	3.92	1.25	Agree
5	Rain water tank	3.56	1.67	Agree
	Total	3.65	0.7	

Criterion mean = 2.50

Table one shows the mean and standard deviation of the respondents on waste disposal methods in schools in Delta State. The result reveals that the respondents agreed to all items as waste disposal methods in schools in DeltaState. This is because the item mean score of 3.67, 3.38, 3.80, 3.92 and 3.56 respectively which are above the criterion mean score of 2.50. Moreover, the overall mean value of 3.65 shows that the respondents generally agreed that all the items are sources of water supply in schools in Delta State.

**Research Question Two**

Are sanitation facilities available in schools in Delta State?

Table 2: Mean and standard deviation analysis of available sanitation facilities

S/N	Items on sources of water supply	X	Std. Deviation	Remark
1	Pit Latrines	3.59	0.54	Agree
2	Flush toilets	3.10	0.98	Agree
3	Cemented urinals	3.62	0.74	Agree
	Total	3.23	0.61	

Criterion mean = 2.50

Table 2, shows the mean and standard deviation of the respondents on available sanitation facilities in schools in Delta State. The result indicated that the respondents agreed to all items as being available sanitation facilities in schools in DeltaState. This is because the item mean score of 3.59, 3.10 and 3.62 are above the criterion mean score of 2.50. Equally, the overall mean value of 3.23 shows that the respondents generally agreed that all the items are available facilities in schools in Delta State.

**Research Question Three**

What are the methods of refuse disposal in schools in Delta State?

Table 1: mean and standard deviation analysis of waste disposal methods.

S/N	Items on sources of water supply	X	Std. Deviation	Remark
1	Open burning of waste	3.33	0.93	Agree
2	Burying waste in landfill sites	2.89	1.13	Agree
3	Composting waste	3.49	0.87	Agree
4	Open dumping	3.61	0.83	Agree
5	Recycling	3.24	0.97	Agree
	Total	3.22	0.51	

Criterion mean = 2.50

Table 3 result shows the mean and standard deviation of the respondents on waste disposal methods in schools in Delta State. The result indicated that the respondents agreed to all items as waste disposal methods in schools in DeltaState. This is because the item mean score of 3.33, 2.89, 3.49, 3.61 and 3.24 respectively which are above the criterion mean score of 2.50. Equally, the overall mean value of 3.22 shows that the respondents generally agreed that all the items are waste disposal methods in schools in Delta State.

**Hypothesis One**

There is no significant difference in the mean ratings of male and female teachers on sources of drinking water in schools in Delta State

Table 4: ANOVA of the significant difference between the mean ratings of male and female teachers on sources of drinking water in schools in Delta State

Source of variation	Sum of squares	Df	Mean square	F	Sig.
Between groups	11.222	2	5.611		
Within groups	146.103	647	.226	24.848	.000
Total	157.325	649			

Significant at 0.05

Table 4 above, shows the ANOVA result on the differences in the mean ratings of respondents of male and female teachers on sources of drinking water in schools in Delta state. The result of the ANOVA indicated an F-ratios Of 24.848 with the significant value of .000 since the significant value is less than 0.05 level of significances, the null hypothesis is hereby rejected. This means that there is a significant difference in the mean ratings of male and female teacher teachers on sources of drinking water in schools in Delta state, both male and female teachers differ in their mean ratings on sources of drinking water in schools in Delta State.

**Hypothesis Two**

There is no significant difference in the mean ratings of male and female teachers on the availability of sanitation facilities in schools in Delta State

Table 5: ANOVA of the significant difference between the mean ratings of male and female teachers on the availability of sanitation facilities in schools in Delta State.

Source of variation	Sum of squares	Df	Mean square	F	Sig.
Between groups	900	2	.450		
Within groups	156.425	647	.242	1.861	.156
Total	157.325	649			

Significant at 0.05

Table 5, shows ANOVA result of the differences in the mean ratings of respondents of male and female teachers on the availability of sanitation facilities in schools in Delta State. The result of the ANOVA showed an F-ratios Of 1.861 with the significant value of 0.156. Since the significant value is more than 0.05 set as level of significances, the null hypothesis is hereby accepted. This implies that, there is no significant difference in the mean ratings of male and female teacher teachers on the availability of sanitation facilities in schools in Delta State.Both male and female teachers do not differ in their mean ratings on the availability of sanitation facilities in schools in Delta State.

**Hypothesis Three**

There is no significant difference in the mean ratings of male and female teachers on method of refuse disposal in schools in Delta State

Table 6: ANOVA of the significant difference between the mean ratings of male and female teachers on method of refuse disposal in schools in Delta State.

Source of variation	Sum of squares	Df	Mean square	F	Sig.
Between groups	15.224	3	5.075		
Within groups	142.101	646	.220	23.070	.000
Total	157.325	649			

Significant at 0.05

Table 6 shows ANOVA result on the differences in the mean ratings of respondents of male and female teachers on method of refuse disposal in schools in Delta State. The result of the ANOVA showed an F-ratio of 23.070 with the significant value of .000. Since the significant value is less than 0.05 set as level of significances, the null hypothesis is hereby rejected. This implies that, there is no significant difference in the mean ratings of male and female teacher teachers on the availability of sanitation facilities in schools in Delta State. Both male and female teachers do not differ in their mean ratings on

the availability of sanitation facilities in schools in Delta State.

**DISCUSSION OF FINDINGS**

The findings of research question one indicated that the respondents are unanimous in their mean ratings. It can therefore be deduced that the respondents generally agreed that borehole, unprotected water spring, purchase of water in sachets, children brought water from their homes and water tanker are sources of water supply in schools in Delta State. This finding agrees with Egbinola and Amanambu who found that borehole and purchase of water in sachet is the source of water supply in secondary schools in Ibadan<sup>(9)</sup>. There was equally no significant difference in the mean ratings of the respondents on the communication patterns in school.

However, UNICEF found in Nigeria that 64% of surveyed schools had no water supply source within their compounds, with students having to trek 2-3 kilometers twice a day for water<sup>(10)</sup>. Also, there is a significant difference in the mean ratings of male and female teachers on sources of drinking water in schools in Delta State.

In the case of research question two, pit latrines, flush toilets and cemented urinary are available sanitation facilities in schools in Delta State. The views of the male and female teachers differ in their mean ratings on the sources of drinking water in schools in Delta State.

Also, the findings of the third research question showed that open burning of waste, burying waste in landfill sites, composting waste, open dumping and recycling were the methods of waste disposal in schools in Delta State. the findings agrees with that of Nansereko who found that diarrhea diseases in Uganda ranked second among the five diseases<sup>(11)</sup>. This is as a result of the poor disposal of waste and unprotected water source.

**RECOMMENDATIONS**

Based on the findings, the following recommendations are made.

1. School authorities should provide good source of drinking water in the school compound.
2. Government and NGOs should assist in providing sanitary facilities in the school.
3. Parents should be encouraged to provide sanitary facilities for their children/wards
4. Government should assist the School Management Board to improve on methods of waste disposal in schools.

**CONCLUSION**

Cleanliness is next to Godliness, and healthier students learn better and become productive members

of the society empowered to share the importance of basic public health measures in their homes and communities. It is obvious from the findings that there is a poor source of water supply, sanitation facilities and method of waste disposal within the areas under study. This result can influence the learning ability of the students, therefore, investing in clean water, sanitation facilities and good methods of waste disposal in schools should become a priority for the government.

#### LIMITATION OF THE STUDY

A study of this nature will not have been accomplished without some constraints. Some of the constraints encountered in this study include the following:

1. The use of questionnaire in the collection of facts is usually fraught with several problems like the distortion of facts, faking and interpretations of the objectives of the questionnaire and the study in general.
2. The limitation of the study to the study of only secondary schools in Delta State of Nigeria deprives it from being generalized to a wider scope. That is the study cannot be generalized to the entire country.

#### CONTRIBUTION TO KNOWLEDGE

The findings of this study highlight that education can guarantee sustainable development through adequate health facilities: the teachers would be more involved and then participate in the achievement of educational goals. From this findings therefore secondary schools could be repositioned and benefits reaped in schools in Delta State

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