

ASSESSING THE CONDITIONS OF SCHOOL BUILDING IN TERTIARY INSTITUTIONS OF BENUE STATE, NIGERIA

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ABSTRACT

This research is aimed to assess the Conditions of School Building Facilities in tertiary Institutions of Benue State, Nigeria. One research questions and one null hypotheses were formulated to guide the study, the researcher employed survey research design that utilized a structured questionnaire developed by the researcher based on the extensive review of the literature related to this study titled Building Maintenance Assessment Tool (BMAT). The research population is 269 comprising of 23 directors of works and 246 maintenance officers. Total Population Sample was used. The overall reliability of the research instrument was found to be .908 and hence it was reliable. Data was collected using a step by step method of administering and retrieving the instrument from the sampled respondents. The data obtained was analyzed using Descriptive Statistics of Mean and Standard Deviation. Statistical Package for Social Sciences (IBMSPSS) version 25 was used and t-test was used to test the hypotheses at 0.05 level of significance. Through the data collected it was found that the Condition of school buildings in tertiary institution of Benue State, Nigeria are moderate. It was therefore recommended that all Tertiary Institutions building should be properly maintained by the Government as this will enable the students learn comfortably without the fear of the building collapsing on them.

Introduction

It is noteworthy that decent educational buildings enhance teaching and learning thereby making the process meaningful and purposeful. Thus, educational buildings are crucial because

they foster effective learning and boost good result (Iyamu, Imasuen, & Osakue, 2018). The quality and standard of a school is ideally rooted on the provision of sufficiency, operation and supervision of educational facilities. Considering the deplorable state of public buildings across the country for decades, a large chunk of the country's resources have been channelled towards Transportation Infrastructure, Government administrative Buildings for ministries and Parastatals, Colleges of Education, Universities, Primary and Secondary Schools (Eke, Musa, Fashubaa, & Abass, 2017).

In spite of millions of Naira spent to erect all these buildings, they are left, as soon as commissioned to face premature but steady and rapid deterioration, decay and dilapidation (Adenuga, 2012). Any constructed facilities can be considered as asset or investment that needs to be maintained to ensure its optimal value over its life cycle. Tertiary institution infrastructure system consists of different types of assets that could have life span beyond 35 years Olasunkanmi, (2021). Olasunkanmi, (2021), further assert that building system like roof, mechanical or electrical systems usually have a shorter life span of 30 years and their supporting structures, these systems are in constant need of maintenance to ensure that they continue to function optimally and retain their value in good appearance. Thus, maintenance is the combination of all technical and administrative actions intended to retain an item, or restore it to a state in which it can perform its required functions. Alblawi and Elhajji (2021) reported that the field of asset management is becoming increasingly professionalize operational knowledge for the practice of asset was found to exist within literature, current software and current practice. However, this body of knowledge in Nigerian tertiary institution particularly in Benue State in particular appears to be less developed and with little or no records (Adah & Maroof, 2022).

Accordingly, a report by National Center for Education Statistics and the National Cooperative Education Statistics System (2003), Planning Guide For Maintaining School Facilities (n.d.) states that school buildings are one of the important facilities for getting basic knowledge in everyday life. Maintenance of school building is also required to serve staff and students well-being besides paying for the brick and mortar of the building. To this end effective school maintenance protects capital investment, ensures the health and safety of the Students, and supports educational performance.

Hence, such nations take maintenance of their infrastructures seriously and use them to attract tourists to their country, yielding revenue for them (Ugwu *et al.*, 2018).

According to Oyigbo and Ugwu (2017), many institutions carry out infrastructure development through PPP but measurable indicators of success or otherwise do not exist. Maintenance is "a combination of any actions carried out to retain an item in, or restore it to an acceptable condition" (BSI 1984, 3811). However, maintenance, according to Olanrewaju (2015), is "the processes and services to preserve, repair, protect, and care for a building fabric and engineering services after completion, repair, refurbishment, or replacement to current standards to enable it to serve its intended function throughout its entire lifespan without drastically upsetting its basic features and use". From the definitions, it can be seen that maintenance is a vital component of an organisation's existence in relation to asset management. It is of great importance that construction management practises are given great attention (Iyamuet *al.*, 2018). Higher education institution buildings constitute a significant part of the nation's assets. As it is understood that tertiary education is an important wheel for the development and progress of a nation, the importance of educational facilities which play host to a large number of users with

various needs as typified by tertiary education facilities cannot be overemphasised (Anifowose & Lawal, 2013). It is through the university buildings that future leaders, captains of industry, entrepreneurs, professionals, and scientists are produced (Eke *etal.*, 2017).

Statement of the Problem

Public and private tertiary institution in Nigeria and particularly Benue State, Nigeria has continued to increase without corresponding increase in school buildings which are in deterioration or over utilized, not properly maintained for effective teaching and learning.

Evidence to this, Onuoha (2022) noted that most of Nigerian school buildings are dilapidated due to inadequate maintenance and repair. In the same vain (Olasunkanmi, 2021), observed that administrators and educational planners have confirmed that buildings in schools especially tertiary institute in Benue State of Nigeria are inadequate and even the available ones are in a state of deterioration. Similarly, Alblawi (2021) observed that the inadequacy of infrastructural facilities and lack of maintenance of available buildings were major problem facing education system and especially in tertiary institution in general. It is in view of the above that Marjanovic-Halburd, (2020), reported the lack of policy guidelines on infrastructure development and the maintenance that affect management of tertiary institutions.

In most of the tertiary institution of Benue State, there are inadequate classroom, staff offices, laboratories, workshop, libraries lecture theater and conveniences. This situation is worrisome since the government has failed to establish policy directives, and or standard in relation to school building maintenance and repair. This problem if not controlled or checked it will go a long way to hamper the teaching and learning process in tertiary institutions of Benue State. It is against this background that the researcher intends to determine the state/condition of school buildings in tertiary institution of Benue State, Nigeria.

Purpose of the Study

The main objective of the study was to determine the condition of school buildings in tertiary institution of Benue State, Nigeria.

Research Questions

This study was guided by one research questions:

- i. What are the conditions of school buildings in tertiary institutions of Benue State, Nigeria?

Hypotheses

The study was guided by one null hypothesis and tested at 0.05 level of significance:

H₀₁: There is no significant difference between the mean responses of Director of Works and Building Maintenance Officers on the conditions of school building in tertiary institutions of Benue State, Nigeria.

Methodology

The study was carried out using Research and Development research design. The study was carried out in Benue State, Nigeria. The population for the study comprised all the 23 Director of work and 246 maintenance officers of the 23 tertiary institutions of Benue State, Nigeria. Total sample population was used. The instrument for data collection in this research was a structured questionnaire developed by the researcher from literature. The instrument was validated by three experts in the Department of Vocational and Technology Education Abubakar Tafawa Balewa University Bauchi and the internal consistency of the questionnaire was determined using Cronbach's Alpha and reliability coefficient was found to be .908.. The data collection was done by the researcher and trained research assistants and the data were analyzed using descriptive statistics of mean and standard deviation and the hypotheses were tested at 0.05 level of significance using independent t-test. The decision rule was that any mean score of 3.00 and above was accepted and where otherwise was rejected.. The rating of the instrument are given Strongly Agree (SA) = 4 points, Agree (A), = 3 points, Disagree (D) = 2 points, and Strongly Disagree (SD) = 1 points

Results and Discussion

Research Question One: What are conditions of school buildings in tertiary institutions of Benue State, Nigeria?

Table 1 shows the mean and standard deviation of the respondents on the state/conditions of school building in tertiary institutions of Benue State. The result shows the cluster mean of Director of Works ranging from 3.45 to 4.75 with standard deviation also ranging from .639 to 1.137 and the mean of Maintenance Officer ranging from 3.05 to 4.45 with the standard deviation also ranging from .946 to 1.126 respectively. The cluster mean of Director of Works is 3.91 and 3.69 for Maintenance Officers. The grand mean of the respondents is 3.71 which indicates that the conditions school buildings in tertiary institution of Benue State is Moderate.

Table 1: Mean and standard deviation of the respondents on the conditions of school building in tertiary institutions of Benue State

S/N	Items	X _d	SD _d	X _m	SD _m	X _g	Remark
1	Status of roof	4.75	.639	4.45	1.016	4.48	Good
2	Status of ceiling	4.10	.718	3.72	.946	3.75	Moderate
3	Status of Walls	4.40	.821	4.00	1.050	4.03	Good
4	Status of Plaster	3.85	.933	3.82	.953	3.82	Moderate
5	Status of Paint	3.75	1.070	3.70	1.126	3.70	Moderate
6	Status of Doors	3.70	1.081	3.68	.977	3.68	Moderate
7	Status of Windows	3.65	1.137	3.39	1.044	3.41	Moderate
8	Status of slab	3.50	1.100	3.43	1.026	3.44	Moderate
9	Status of Floor	3.45	1.050	3.05	1.372	3.08	Moderate
	Cluster Mean	3.91		3.69		3.71	Moderate

Source: Fieldwork, 2024

Result of Null Hypotheses

Null Hypothesis One (H_{01}): There is no significant difference between the mean responses of Director of Works and Building Maintenance Officers on the conditions of school building in tertiary institutions of Benue State, Nigeria.

The result of the independent t-test is presented in Table 2 showed that there is no significant difference between the mean responses of Directors of Work and Building Maintenance Officers on the conditions of school building in tertiary institutions in Benue State, Nigeria within the df of 267, t-value = 1.306, p-value = .194. Since the p value is greater than the confidence level ($P > 0.05$) therefore, the null hypothesis was accepted. This implied that there is no significant difference between the mean responses of Directors of Work and Building Maintenance Officers on the state/conditions of school building in tertiary institutions in Benue State, Nigeria.

Table 2 t-test analyses of the mean responses of Directors of Work and Building Maintenance Officers on the state/conditions of school building in tertiary institutions in Benue State, Nigeria

	N	X	S.D	Df	t-val	p-val	Decision
Director of Works	23	3.91	.561	267	1.306	.194	Accepted
Maintenance Officers	246	3.69	.676				

Findings of the Study

Below is the finding of this study:

1. Condition school buildings in tertiary institution of Benue State, Nigeria are moderate and hence Null Hypotheses one (H_{01}) was upheld which means there is no significant difference between the mean responses of Directors of Work and Building Maintenance Officers on the state/conditions of school building in tertiary institutions in Benue State, Nigeria.

Discussion

Condition school buildings in tertiary institution of Benue State, Nigeria are moderate. This finding is in agreement with that of Kanayochukwua, (2020) who states that the conditions of educational facilities are not in disarray and properly maintained but however this finding does not agree with that of Luka, et al, (2023) who observed that buildings of the Bauchi State Technical Colleges are in a bad and deplorable working condition and therefore need a maintenance. Furthermore, this finding did not also agree with that of Eke et al (2017) who reported that many public school building and government-owned facilities are not well maintained and in poor condition and fail to agree with that of Babayo (2017) who also reported that in Bauchi State especially in the suburb areas, most of the school buildings are in shambles. Some of them still wear the look of the old and the work of Adenuga and Iyagba (2005) which noted that public

buildings in Nigeria are in very poor and deplorable conditions of structural and decorative disrepairs. The study also revealed that the existing building stocks in the schools were in a state of decay due to lack of maintenance and repair. Lastly this finding is also in concord with the work Izobo-Martins et al (2014) who similarly confirmed that most public secondary school buildings in Ogun State Nigeria are in very poor and deplorable conditions of infrastructural disrepair

Conclusion

In conclusion, the condition of Tertiary Institution buildings in Benue State, Nigeria is moderate and there is also the need for adequate maintenance activities to be carried out on the other buildings which require such services.

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