International Journal of Research Publication and Reviews

USERS' PERCEPTIONS ON THE PRESENT CONDITIONS OF PUBLIC SECONDARY SCHOOL FACILITIES WITH TEACHING AND LEARNING IN ANAMBRA STATE NIGERIA.

Adah Okechukwu Uchenna[1], Charles Chukwunwike Egolum[2]

[1] Department of Estate Management, Nnamdi Azikiwe University Awka, Anambra State Nigeria

[2] Department of Estate Management, Nnamdi Azikiwe University Awka, Anambra State Nigeria

ABSTRACT:

The paper examines the relevance of physical facilities in enhancing the level of motivation and academic performance of public secondary school students in Anambra State Nigeria. The sample frame of this study includes staffs (Teaching and Non-Teaching) of the public secondary schools within Anambra State. Descriptive statistical tools used in this study includes; pie charts, simple percentages, and standard deviation. The instrument used for data collection was a self-structured likert scale modified questionnaire to determine respondents' agreement with the identified weaknesses and strengths of the developed construct from strongly disagree, to strongly agree and were presented in tabular forms with simple percentages. The findings of the study shows that financial constraints, economic factors, poor maintenance culture, vandalizing by students, unclear roles by school heads, inadequate physical infrastructures, overpopulation in the schools, poor work environment, and poor leadership/management were the challenges encountered by school principals in the management and maintenance of school facilities. Measures to be adopted to enhance maintenance of the school facilities identified includes: regular supervision, and keeping of inventories of material resources. Based on the findings, recommendations made include; increased funding, regular supervision, motivation of teachers, and training of personnel on maintenance techniques. Findings of this study implies that if adequate attention is given to the condition of school facilities, there will be significant improvement in teaching and learning in Public secondary schools in Anambra State and Nigeria in general.

Introduction :

The school is a formal organization and veritable machinery for the development of a country. It is made up of school administrators or heads of schools, school teachers and students. They all form a group of people in constant interaction on a daily basis within the school environment geared towards transmission of societal values. In the light of these values, education today must prepare the child to function effectively as an adult in the 21st century. However, Nigerian schools are the least ready to adapt to the onslaught on new information and practices accumulating on a daily basis due to the challenges ranging from poor school facilities maintenance, lack of funds for infrastructural development and a host of others. This is evident in the suggestion that teachers are handicapped by inadequate facilities which makes it difficult for the teachers to prepare students for the new development.

School facilities are one of the major aspects of school administration and refer to all the material provisions in a school environment while school facilities maintenance has to do with all the necessary care given to all the facilities used in the school. Amanchukwu and Ololube (2015), describe school facilities as the school site and all the essential structures, permanent and semi-permanent facilities such as machines and laboratory equipment and chalkboard needed for effective teaching and learning. School facilities are the space interpretation of the school curriculum. In this case, the curriculum will be impossible to implement without the physical facilities required for teaching and learning which are neither available nor inadequately provided and maintained. The general attitude of school administrators towards the maintenance of the school facilities in turn determines to some extent, the efficiency in the use and effectiveness of the school facilities in supporting the academic program and satisfying the needs of the users, including the members of the community.

It is believed that well-maintained schools facilities will gear up expected outcomes of education that will facilitate effective teaching and learning processes and academic performance of the students (Adesina, 2011). Emphasizing the importance of school facilities' maintenance on students' academic performance, Oluchukwu (2000) asserted that school facilities' planning and maintenance like blackboards, school buildings, classrooms, library, laboratory, and school environment is an essential aspect of educational planning. If school facilities are not well maintained, adequate utilization becomes impossible entailing that effective teaching and learning may not take place. School facilities will enhance better school programs and community needs by providing a place for psychological and physical safety for students and teachers and enhancing the good quality and quantity of instruction. Academic performance is the outcome of education. It is the extent to which a student, teacher or institution has attained a level of educational goal. Thus, students' academic performance is characterized by performance on tests associated with subject work and the performance of students on other types of examinations which of course is guaranteed through effective provision and maintenance of school facilities which involves school buildings, libraries and laboratories, ICT facilities, classrooms, etc. Similarly, Ajayi (2007) maintained that high levels of students' learning

outcomes may not be guaranteed where school facilities' maintenance and planning are not properly undertaken and the plants' components themselves are structurally defective, not properly ventilated and not spacious enough for use.

The fundamental purpose of teaching and learning is to bring about positive change in behavior through critical thinking. This process does not take place in a vacuum but in an environment well equipped and set aside to facilitate learning. Managing the instructional materials helps in promoting effective teaching and learning for the overall development of the entire school system. Since education seeks to develop the minds and character of future citizens; their abilities, skills and potentials must be nurtured to meet the needs for contemporary society. To do this, school facilities have to be maintained effectively through supervision.

Statement of the Problem:

The challenges facing Public Secondary Schools are multifaceted and include the following; teachers' dissatisfaction, non-commitment of educators, chronic absenteeism by educators, low morale, poor work ethics by educators, late coming of both educators and learners, overcrowding in classes, lack of technical resources and many others (Bosah, 2015). A cursory investigation of public secondary school facilities in Anambra State shows that they are in deplorable conditions of Structural, aesthetical and decorative disrepair. Many buildings have obsolete mechanical and electrical systems, as well as problems with roofing, asbestos, safety, and high operational costs (Ayers 2019). It is against this background and the need for a proper understanding of the outcome of various maintenance strategies in Public Secondary School Facilities that an in-depth evaluation was carried out in this study.

Aim and Objectives

The aim of this study is to evaluate users' perception on the present condition of Public Secondary School facilities with teaching and learning in Anambra State

The Objectives Includes:
1. To determine the relationship between users' perceptions on the present conditions of public secondary school facilities in Anambra state with teaching and learning,

2. To determine the relationship between the current state of public secondary school facilities in Anambra state and students' academic performance.

Research Questions

To address the goal of this study, the following research questions were formulated;

1. What is the relationship between users' perceptions on the present conditions of public secondary school facilities in Anambra state with teaching and learning?

2. What is the relationship between the current state of public secondary school facilities in Anambra state and students' performance?

Research Hypotheses

Ho1: Users' perceptions on the present condition of public secondary school facilities in Anambra state do not significantly affect teaching and learning.
Ho2: The current state of public secondary school facilities in Anambra state does not significantly affect students' performance.

Significance of the Study

This study attempts to provide solution to the present condition of poor maintenance of public secondary school facilities, based on the opinion of users and maintenance managers. The study will add to the existing body of knowledge by suggesting factors that relate to the deterioration of public secondary school facilities and provide valuable maintenance solutions that can be adopted by administrators, policy makers, school managers, ministries of education, government and school planners and designers in Nigeria.

LITERATURE REVIEW:

School Facilities

School facilities are one of the major aspects of school administration and refer to all the material provisions in a school environment. Njoku (2019) describes school facilities as educational facilities that are tangible such as buildings, land equipment, machineries, furniture, fixtures and fittings which are put into use and capable of providing excellent educational services. Yusuf (2020) defined school facilities as space interpretation of school

curriculum. This means it will be impossible for the curriculum to be implemented if the physical facilities required for teaching and learning are not available. It also includes the site, the buildings and the equipments.

It includes permanent and semi-permanent structures as well as items such as machines, laboratory equipments, the blackboards/chalkboards, learners and teacher tools.

School facilities also refers to the entire physical infrastructures provided in the school for the purpose of educating the child which includes the school site and all the structures that have been put in place to aid effective teaching and learning in the school system. School facilities also refers to all non-consumables and durable physical and infrastructural facilities available in the school for teachers' and students' use in order to make teaching and learning effective and thus ensure the achievement of predetermined aims and objectives of education. Hence, it includes the space within the school premises which houses the basic systems and structures. Asiabaka (2021) defines school facilities as an integral element in teaching and learning environment because of its direct and indirect roles. Olaniyan and Anthony (2018) asserts that school facilities physically and spatially enable teaching and learning and by extension helps in producing desirable results as evidenced by good academic performance of products of an education. School facilities are permanent structures which include buildings, libraries, chairs, machines, technical workshops, playgrounds and other non-human resources that aid the actualization of teaching and learning objectives (Asiyai, 2022).

Importance of School Facilities

Many researchers have shown the obvious relationship between school facilities and curriculum which in turn affects effective teaching and learning. The impacts of the physical environment, in which teaching and learning take place is very important. They include:

(i) School facilities helps improve students' academic performance in achievement tests like (WAEC, NECO, JAMB, etc.)

(ii)School facilities improve attendance of students and reduces dropout rate.

(iii)School facilities improves students' attitude toward learning

(iv)It boosts teaching effectiveness, and is very essential for academic achievement.

(v) It promotes positive outcomes in the teaching and learning process. The school facilities are the pillar and support of all teaching activities.

Maintenance of School Buildings and Student Academic Performance

School buildings consist of classrooms, offices, conveniences, sporting facilities, security, laboratories, halls and workshops. Bloom in Nweneka (2021) opines that a well functional school building with a wide array of teaching and learning aids provided positively relates to quality assurance in academic performance. The quality of education received by the students bears direct relevance to the availability or lack of physical facilities and the overall environment in which learning takes place. Availability of adequate and sufficient school facilities is thus expected to positively reflect on the academic performance of students. Proper maintenance culture is an alternative when compared to the financial implication and cost when available school building facilities are left to deteriorate. The school managers must engage in suitable maintenance practices to lengthen the life span or durability of school buildings. These will in turn save lives, cost and also attract parents to schools. Maintenance must satisfy some objectives which include prevention of school building deterioration and ensure other contingencies such as broken windows, leaking roofs, and doors. There is actually a belief that the outward appearance of schools affects the Learning and academic performance of students and teachers' efficiency.

Maintenance of School Library and Students' Academic Performance

Teaching and learning mostly takes place in the classrooms. However, a reasonable amount of the materials needed for effective teaching and learning are found in the library. The school library provides basic ancillary services that should be provided by any good institution (Agabi&Okrie, 2020). Books in the library are made appropriate for the age and level ofthe learners. The needs of the students and teachers must be captured when setting up a library. The library is made up of books and non-book materials such as records, Files, slidesand artifacts. The library plays a major role in the enhancement of learning and teaching activities which takes place in the classrooms.

Challenges to having a good School Facilities Maintenance Culture

Some of the factors militating against having a good school facilities maintenance culture are:

(i) Financial Constraints:

Finance is a crucial factor when setting up any project in the school and architectural design of the school facilities. Sometimes substandard materials are used for school buildings and facilities due to inadequate finance.

(ii) Economic Factors:

When the economy is not strong it affects every aspect of life. A country's economy melts down and also affects setting up projects in the school, low school environment; poor funding of school facilities has contributed to low quality of school materials or facilities.

(iii) Poor maintenance culture:

Wrong attitude towards handling school facilities makes some schools suffer from gross dilapidation of facilities.

(iv) Vandalizing by Students:

Vandalizing of school facilities by the students cost money and makes school facilities less attractive and even unsuitable for use. Thus, schools should provide orientation to students and other personnel on the importance of watching and caring for school properties.

(v)Unclear Roles of School Heads:

Heads of secondary schools have complained that their roles regarding maintenance of school facilities have remained unclear. Thus, when vital equipments break down close to examination periods the principal or school heads would be in a dilemma on how to fix it quickly. In such emergency situations heads of schools often spend their money in anticipation of refunds which rarely comes. Therefore, school heads often remain helpless and watch school facilities waste when little funds could have restored their functionality.

(vi)Inadequate physical infrastructure:

The state of physical infrastructures in public secondary schools is not encouraging. This poses serious setback to the attainment of goals and objectives. Capital projects to meet the expanding programmes cannot take off due to lack of funds. For schools to effectively perform their roles there must be adequate funding to maintain the existing buildings, research and construction of new facilities.

(vii) Over population in the schools.

Expansion in students' intake and overpopulation has put immense pressure on the available facilities in the system. The overall growth rates have far exceeded government policy guidelines. In recent years, enrolments have increased more quickly than the schools can accommodate or support.

(ix) Poor work environment:

For better performance on the job, the best environment should be provided. Analyzing the learning environment of the school system in Nigeria, Ojogwu and Alutu (2009) describe the environment as unconducive, unproductive, unattractive and unhealthy with decayed and dilapidated infrastructural facilities. Commenting earlier on this state of affairs on staff productivity, Akuezuilo (2007) states that many staffsare employed without the required facilities to cope and perform their jobs. These inadequacies can neither promote, nor sustain the high quality standards needed in the schools.

(x) Poor leadership/management:

Professional management techniques and training has generally not been applied. Schools demand the application of proactive management styles that address problems through innovations. It requires administrative structures that facilitate institutional responsiveness to the wide range of stakeholders (Saint et al.,2017). According to Ekaette (2019), a lot of managers in schools do not possess the requisite skills (in human relations) needed for effective and efficient leadership. This has led to poor leadership and ineffective style of administration. Udida et al. (2021) observe that some leaders in schools do not have the zeal to supervise and monitor activities and staffs exhibit nonchalant attitude towards work.

Empirical Studies

Wordu and Nlerenchi (2021) conducted a work on school plants' provision and academic performance of secondary school students in Tai and Eleme local government areas, River State. A survey design was adopted. The result of the analyses showed that a significant relationship exists between schools' plant provision and academic performance of students in the secondary schools. The study recommended that school buildings should be designed with adequate space, ventilation, lighting, humidity and temperature. Instructional materials, library facilities and science laboratories should be adequately provided, the study further recommended that school administrators should take the challenge of providing adequate school facilities to ensure and Sustain higher academic performance.

Okolie (2011) carried out a study on Performance evaluation of buildings in Educational institutions: a case of universities in South-east Nigeria. The review of literature and case study in the study revealed and identified the key performance measures and best practice criteria as fitness for purpose, accessibility, maintenance, adaptability, flexibility, funding, cost effectiveness, comfort/satisfaction, productivity, aesthetics, security, health and safety. The literature also pointed out that educational buildings must provide a healthy and safe environment in terms of portable water, sanitary facilities, fire safety and lighting, secure design, safe finishes and safe vehicular and pedestrian traffic.

Oladapo (2020) carried out a study on comparative evaluation of building maintenance management of tertiary educational institutions in Osun state, Nigeria. The author examined maintenance management of the institutions, using maintenance policy and strategy, maintenance budget and finance, the

building state and organization of the maintenance departments. The findings showed that each of the institutions had a central maintenance department headed by a director. It also showed that none of the institutions had a maintenance policy.

Buys (2004) cited shen*et al.* (1999) in a study on causes of delays in carrying out maintenance work in South Africa. The study noted that sometimes maintenance is delayed and deprived. According to the author, occasionally insufficient number of maintenance staffs was cited as the main cause for delays in carrying out maintenance work. These studies established that funding and age are factors of building deterioration.

METHODOLOGY

Research Design

Specifically, this study adopts the survey research design. Stratified random sampling is used to select the samples of public secondary schools for questionnaire survey. Two principal survey techniques used were administration of questionnaires and non-participant observation. These techniques enabled the researcher to collect both qualitative and quantitative data from the school users and managers of the buildings and facilities in the schools.

Population of the Study

Population of this study consists of the public secondary school staff in the five (5) Education zones of Anambra State

Sample Frame

A sample frame is the list of sampling units or non-theoretical population from which samples are drawn. It is a population the researcher can use in determining sample size. The sample frame of this study includes staff (Teaching and Non-Teaching) of the public secondary schools within Anambra state. According to the Anambra state Post primary school service commission, the public secondary schools in Anambra state cut across five zones which are (Aguata zone, Awka zone, Nnewi zone, Onitsha zone and Otuocha zone).

Determination of Sample Size

The sample size of the study is determined by using Taro Yamane's formula. In this method, a researcher is expected to adopt a sampling error of 0.05. The formula is given as,

$$n = \frac{N}{1 + N(e)^2}$$

Where: **n** stands for samples.

N stands for the size of sample frame or population which is **5576**

e stands for sampling error which is **0.05**

1 stands for unity (a constant).

Substituting into the formula;

$$n = \frac{5576}{1 + 5576(0.05)^2}$$
$$n = 373$$

Therefore, the sample size for the study is approximately 373

Instrument of Data Collection

The study obtained both primary and secondary data. Quantitative data was collected from the public secondary school facilities users through a structured questionnaire which was used in eliciting information from facilities users. There were two separate questionnaires, one for each group. The questionnaire was designed to give an assessment of the maintenance strategies from the maintenance managers and the facilities condition.

Questionnaire 1 consisted of three sections, with school users' information in Section A. maintenance opinion in Section-B and conditions of facilities components in section –C. However, questionnaire 2, consisted of three sections namely; maintenance managers information in Section-A; maintenance strategies in Section-B and factors of deterioration in Section-C. The respondents were asked to indicate the level of satisfaction or dissatisfaction with some selected quality performance criteria.

Qualitative data was obtained by physical survey of the existing facilities in the schools. The secondary data was derived from multiple sources such as books, journals, research works, encyclopedias, magazines, school records, working papers and relevant publications.

Reliability of the Instrument

Reliability is often at risk when assessments are taken overtime, performed by different people or are highly subjective. Reliability is concerned with the consistency in the results given by the same instrument and this was tested using Cronbach's alpha test.

Method of Data Collection

This study used two major data gathering instruments: questionnaire and observation schedule. Both were used in the collection of primary data for this study. Two sets of questionnaire were prepared based on findings from the review of the existing literature. One for the school maintenance managers and the second one for the staffs of the secondary schools who are the users of these facilities in the selected schools. All the questions were close ended.

Method of Data Analysis

Method of data analysis refers to the statistical (or analytical) tools a researcher used in analyzing the primary data in order to achieve each of the objectives stated in that study. In this study, descriptive and inferential statistical tests were employed. Descriptive statistical tools in this study include; pie charts, tables, simple percentages, mean and standard deviation etc. Inferential tools draw conclusion that extends beyond immediate data, they have ability to test hypothesis, and the hypotheses for this study was tested using the structural equation modeling. For this study, Likert scale was used to determine respondents' agreement with the identified weaknesses and strength of the developed construct from strongly disagree to strongly agree and was presented in tabular form with simple percentages.

RESULTS AND DISCUSSIONS

Respondents answered a number of questions to gauge their proper knowledge and understanding about maintenance issues as it affects school buildings and appropriate condition of building components in public secondary schools in Anambra state. The numbers of responses are summarized in the following Tables.

Maintenance Issues as it affects school facilities

	Category			
Does the current state of facilities affect the teaching and learning of users?	Yes 304 [84.4%]	No 56 [15.6%]		
Do you have a maintenance crew in your school?	Yes 97 [26.9%]	No 263 [73.1%]		
Does the current state of the school facilities affect the behavior of the users in the school?	Yes 297 [82.5%]	No 63 [17.5%]		
Which academic building is the most deteriorated in the school?	Classroom 189 [52.5%]	Library 71 [19.7%]	Computer room 32 [8.9%]	Laboratory 68 [18.9%]
What are the contributions of students in the maintenance of the school facilities?	Sweeping, weeding/cleaning 296 [82.2%]	Technical Involvement == [%]	Not Involved 17 [4.7%]	Paying main. fee 47 [13.1%]
What are the contributions of academic staffs in the maintenance of the school facilities?	Supervising 237 [65.8%]	Consciousness ==[%]	Nothing 21 [5.8%]	Punishing offenders 102 [28.3%]
What are the contributions of non-academic staffs in the maintenance of the school facilities?	Sweeping /cleaning 298 [82.7%]	Weeding == [%]	Technical work62 [103.3%]	
In your opinion are the academic buildings properly maintained?	Yes 207 [57.5%]	No 147 [40.8%]		
What is your opinion about the present conditions of the components of the buildings?	Good 37 [10.3%]	Bad 323 [89.7%]		
What are the factors responsible for the deterioration of school facilities?	Age == [%]	Lack of maint. culture 107 [29.7%]	Users attitude 86 [23.9% }	Over population == [%]

(Funding 167 [46.4%])

Condition of facilities components

	Category			
What is the condition of the foundations?	Existing cracks 156 [43.3%]	Exposed 77 [21.4%]	Weak 108 [30%]	Good Condition 19 [5.3%]

What is the condition of the Roofs?	Leaking 162 [45%]	Rusty 77 [21.4%]	Partly Ripped off52 [14.4%]	Ripped off 23 [6.4%]	Good condition 46 [12.8%]
What is the condition of the paintings?	Not Painted 137 [38.1%]	Faded paint 89 [24.7%]	Dirty paint 85[23.6%]	Well painted 49 [13.6%]	
What is the condition of the floors?	Cracks 77 [21.4%]	Peeled-off 84 [23.3%]	Has Defects 163 [45.3%]	No defects 36 [10%]	
What is the condition of the walls?	Partly broken down138 [38.3%]	Developed cracks 123[34.2%]	Pilled off 39 [10.8%]	Tilled 19 [5.3%]	Good Condition 41 [11.4%]
What is the condition of the windows?	Not Existing 81 [22.5%]	Partly broken down112 [31.1%]	Completely broken 69 [19.2%]	Good Condition 98 [27.2%}	
What is the condition of the doors?	No doors 57 [%]	Partly broken down144 [%]	Completely broken 78 [%]	Good Condition81 [%}	
What is the condition of the electrical installations?	Not Existing 63 [%]	Not functioning 77 [%]	Faulty 198 [%]	Good Condition 22 [%]	
What is the condition of the water pipes?	No water pipes 202 [%]	Leaking taps 12 [%]	Broken down 43 [%]	No water 103 [%]	
Which type of toilet facility do you use?	Water closet 31 [%]	Pit latrine 121 [%]	Bush 208 [%]		
What is the condition of WC?	Leaking 12 [3.3%]	Broken down 166 [46.1%]	Not functioning 182 [50.6%]		
Source of water supply	Borehole ==[%]	Spring ==[%]	Not supply 277[76.9%]		
Condition of drains/gutter	Open gutter 87 [24.2%]	Covered with concrete 63 [17.5%]	Not existing 210 [58.3%]		
The school compound is very clean	Strongly disagree 73 [%]	Disagree [%]	Average [%]	Agree [%]	Strongly agree [%]

Descriptive Statistics

The statistics are included to check the integrity of the data and to provide an overview of the statistics.

Descriptive Statistics

Variables	Mean	Std.Dev	N
Users' perception on the condition of public schools	3.461	1.026	360
Teaching and learning	3.149	1.106	360
Current state of public school	3.379	1.485	360
Factors responsible for maintenance of public school	3.263	0.911	360
Student performance	3.291	1.421	360
Maintenance policies and strategies	3.121	1.439	360
Staff working condition	3.592	1.021	360

Source: Researcher's SPSS result 2023

As shown in the table above, the KMO value was 0.822, which was within the acceptable range where the base satisfactory value is 0.70. Because the significance was less than 0.05, Bartlett's Test Sphericity reflected large outcomes (0.00), p 0.05. Similarly, EFA was deemed appropriate for this investigation.

KMO and Bartlett's Test.

Kaiser–Meyer–Olkin Measure of Sampling Adequacy		0.822
	Approx. Chi-Square	2376.834
Bartlett's Test of Sphericity	Df	24
	Sig	0.000

Source: Researcher's SPSS result 2023

Total Variance Extracted

The table below depicts the total variance explanation (factor analysis) of the facilities condition and maintenance strategies, with factors accounting for 62.028% of the total variance. This demonstrates the significant effect of facilities condition and maintenance strategies in public secondary schools in Anambra state. Furthermore, the approximated Chi-square value ($\chi 2$ (co) = 2376.834) is greater than the Chi-square critical value ($\chi 2$ (t) = 41.34) with (Df) at 0.05, thus further indicating that there is a statistically significant effect of building condition and maintenance strategies in public secondary schools in Anambra state.

Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.406	62.028	62.028	12.406	62.028	62.028
2	2.367	11.836	73.864	2.367	11.836	73.864
3	1.631	8.153	82.017	1.631	8.153	82.017
4	.997	4.983	87.000			
5	.802	4.010	91.010			
6	.586	2.930	93.940			
7	.286	1.432	95.372			
8	.283	1.416	96.789			
9	.222	1.111	97.900			
10	.159	.794	98.694			
11	.069	.346	99.039			
12	.055	.275	99.314			
13	.051	.256	99.570			
14	.044	.218	99.789			
15	.029	.147	99.935			
16	.011	.046	99.981			
Extraction Method: Principal Component Analysis.						

EFA and Cronbach's Alpha

An EFA test was performed using Amos SPSS to assess the dimensionality of the constructs evaluated in this study. The KMO test was used to assess whether the samples were sufficient, and the result is significantly higher than the 0.5 thresholds. To determine whether there is a correlation between the variables, the Bartlett test of sphericity was performed, and the results were significant (p-value<0.05). EFA proposed components with eigenvalues greater than one. These factors accounted for more than 62.028% of the variance in the study. Cronbach's Alpha values were found to be greater than 0.7

Table 4.7.1: Summary of Exploratory factor analysis and Cronbach's alpha

	Users' perception on the condition of public school	Teaching and learning	Current state of public school	Factors responsible for state maintenance of public school	Student academic performance	Maintenance policy and Strategies	Staff working condition
USP1	0.683						
USP2	0.782						
USP3	0.702						
USP4	0.718						
USP5	0.544						
TL1		0.480					
TL2		0.647					
TL3		0.832					
TL4		0.818					
CPS1			0.650				
CPS2			0.696				
CPS3			0.774				
CPS4			0.776				
FRP1				0.604			
FRP2				0.260			
FRP3				0.512			
FRP4				0.874			
SP1					0.912		

SP2					0.911		
SP3					0.875		
SP4					0.771		
MSP1						0.175	
MSP2						0.889	
MSP3						0.884	
MSP4						0.836	
MSP5						0.846	
SWC1							0.908
SWC2							0.868
SWC3							0.458
Cronbach Alpha	**0.876**	**0.727**	**0.715**	**0.874**	**0.927**	**0.901**	**0.769**

Interpretation of Factors

To choose salient variables for each factor, a threshold loading value of 0.40 was used, and the variables were loaded for extracted factors. According to the above table all variables have a loading value greater than 0.4, indicating that they contributed significantly to their factor groups. To determine the reliability of each factor, Cronbach's Alpha Value was calculated for each of them; and only factors with a value greater than 0.5 (factors 1-8) were significant. As shown in the table, the 28 success factors (variables) used for the study are categorized into 7 namely: Users perception on the condition of public schools, teaching and learning, current state of public school, factors responsible for maintenance of public school, student performance, maintenance policies and strategies and staff working condition.

Summary table for the hypothesis testing

		Estimate	t-Statistic	p-value
H_{01}	Users Perception on the condition of public schools -> Teaching and learning.	0.293	2.478	**0.013**
H_{02}	Current state of public school -> Student academic performance	0.085	1.924	**0.048**

A structural model was devised based on the proposed idea. According to the model evaluation measures, the data and hypothesis are well matched. The regression weights confirm our hypothesis. Hypotheses such as H_{01}, and H_{02}, were found to be positively and statistically significant at 5% level of significance.

The implication of the result is that a unit change in users perception on the condition of public schools will lead to a corresponding increase in teaching and learning. And also, a unit change in the current state of public schools will lead to an increase in student academic performance.

Discussion of Findings

Kaiser–Meyer–Olkin (KMO) and Bartlett's Test of Sphericity BTS were used to measure the sampling adequacy and significant level, since obtaining acceptable values of these tests guarantees the appropriateness of EFA analysis. This led to obtaining the total variance extracted, the result indicates that the total variance explanation of the building condition and maintenance strategies, with factors accounting for 62.028% of the total variance. This demonstrates the significant effect of building condition and maintenance strategies in public secondary schools in Anambra state.

The factor correlation matrix suggests that all the variables included in this study, the result shows both negative and positive correlation of the variables. All the factor loadings displayed infer that the construct employed in this study was above the recommended 0.4 threshold which suggest that we retain all the construct as developed in each variable.

Conclusively, from the result of the hypothesis, we see that at 5% level of significance H_{01}, and H_{02}, are to be accepted since their p (<0.05). Hence the result of the specific objectives is presented below

Hypothesis One

The result of the analysis test with respect to hypothesis one shows that at 5% level of significance, users' perception on the condition of public school has a significant positive effect on teaching and learning with a probability value (p<0.05).

Hypothesis Two

The result of the analysis test with respect to hypothesis two shows that at 5% level of significance, the current state of public schools has a significant positive effect on student academic performance with a probability value (p<0.05).

CONCLUSION AND RECOMMENDATION

Facility, issues arise at all educational levels, from pre-kindergarten through post-secondary, and at all sites, from classrooms to administrative offices. Challenges arise in new and old facilities alike, though the types of concerns may differ. The environments of the educational institutions are anything but conducive for learning. Lecture rooms/halls which are in short supply are usually in bad conditions, either suffering from leaking roofs or collapsing walls. Students hardly find chairs to seat on during lectures. The situation is most pronounced in state owned institutions. It is against this background and the need for a proper understanding of the users' perception on the present conditions of public secondary school facilities with teaching and learning in Anambra state that an in-depth evaluation was carried out in this study

Based on the results of this study, the following recommendations are made as effective means of improving the performance of facilities in the public secondary schools in Anambra State.

Recommendations for Public Secondary Schools

(1) There should be a state legislation to regulate the maintenance of public secondary school buildings by developing state building and maintenance code. It should also deal with the issue of accessibility, electricity supply, fire protection, plumbing, water supply and other infrastructures.

(2) Anambra State government needs to develop and formulate policies and strategies for maintenance planning and development of minimum maintenance standards for public secondary school facilities in the state. This may be through renovation permit for minor repair works, major repair works and total redevelopment, decoration and improvement notice. In addition, planning standards for school building developments must also be well spelt out, such as planning standards, architectural standards, structural engineering standards, electrical engineering standards and mechanical engineering standards.

REFERENCES :

1. Adesina, O. B. (2011). School plant planning as correlates of students' academic performance
2. in Southwest Nigeria Secondary Schools. *International Journal of Business Administration*, 2(2), 41-47. http://org.doi:10.5430/ijba.v2n2p41
3. Akuezuilo. (2007). Assessing school facilities in public secondary schools in Delta State,
4. Nigeria. African research review. *An International Multidisciplinary Journal, Ethiopia*, 6(2), 192-205.

5. Ajayi, I. A. (2007). *Issues in school management*. Bola bay Publications.
6. Amanchukwu, R., &Ololube, N. P. (2015). Managing school plant for effective service delivery in public secondary schools in Rivers State of Nigeria. *Human Resource Management Research*, 5(4), 95-102.http://doi.org.10.5923/j.hrmr.20150504.02

7. Asiabaka, I. P. (2021). The need for effective facility management in schools in Nigeria.
8. *New York Science Journal*, 1(2), 10-21.

9. Asiyai, R. I. (2022). Assessing school facilities in public secondary schools in Delta State,
10. Nigeria. African research review. *An International Multidisciplinary Journal, Ethiopia*, 6(2), 192-205

11. Ayers. (2019). The Applicability of Usability Concepts in the Built Environment.
12. *Journal of Facilities Management*. 4(4); 262-270

13. Bloom. (2021). 'The relationship between design of school facilities and student
14. behaviour and academic achievement'. Unpublished doctoral dissertation, The University of Mississippi

15. Bosah. (2015). Teachers' satisfaction with physical working environment: imperative for effective service delivery. Journal of Education and Human Development, 7(1), 92-97.

16. Buys, N.S. (2004). *The Physical Learning Environment: A Path to Success or Not?* Inaugural
17. Lecture Delivered at Nelson Mandela Metropolitan University. Port Elizabeth, South Africa. 4th August

18. Ekaette, U. J. (2019). Policy Focus and Value System in Higher Education. *The Guardian*. Lagos: 18 June; Pp. 58-59.
19. Njoku, D.C. (2019). *Relationship between organizational factors and administrative effectiveness of university academic managers in Imo and Rivers State of Nigeria.* Unpublished M.Ed thesis, Faculty of Technical and Science Education, Rivers State University Press.

20. Okolie, K.C and Shakantu, W.M. (2011). Design and User/Occupier Needs in Building Performance. *Conference Proceedings of COBRA 2009* held in Cape Town. Organized by the Royal Institute of Chartered Surveyors (RICS). September 9-11. Pp. 998-1010

21. Olaniyan and K.I. Anthony, (2018). Effect of inadequate school plant on academic performanceof Nigerian secondary school students. *International Journal of Humanities and Management Sciences,* 1(3): 198-200.

22. Ojogwu and Alutu. (2009). Enhancing the Instructional Supervisory Skills of Principals of Secondary Schools. Principals Year Book. A Publication of all Nigerian Conference of Principals of Secondary Schools (ANCOPSS). Nsukka, Nigeria: Moke Social Publishers

23. Okonkwo, M. E. (2018).Overview of Total Performance Concept of Buildings: Focusing on

24. Quality, Safety, and Durability. *Paper presented at the 34th   Annual Conference of the Nigerian Institute of Building* held in Abeokuta. April 27-28. Pp 2-10.

25. Oluchukwu, S. O. (2000). *Development of Facilities Maintenance and Management Strategies*

26. *For Nigeria.* Enugu: Unpublished Facilities Management Course Manual. Centre for Academic Excellence

27. Saint, W; Hartnett, T. and Strassner, E. (2017). Higher Education in Nigeria. *HigherEducation Policy*. 16; 259-281

28. Udida, L.A. (2021). Issues *in National Policy on Education in Nigeria.*Calabar: University of Calabar press.

29. Wordu, H. and Nlerenchi, W.W (2021). School plant management for effective instructional

30. Delivery in public senior secondary schools in Port Harcourt metropolis. *International Journal of Education and Evaluation,* 4(8) 67-76.