

## STAKEHOLDERS' PERCEPTIONS ON THE INFLUENCE OF SCHOOL PHYSICAL STRUCTURE ON STUDENTS' PERFORMANCE IN PUBLIC COLLEGES OF EDUCATION IN KADUNA STATE, NIGERIA

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### Abstract

This research work investigated stakeholders' perceptions on the influence of school physical structure on students' performance in public colleges of education in Kaduna State. For the purpose of this study, two objectives were formulated as: Assess the influence of physical environment on students' performance in public colleges of education in Kaduna State; and Find out the influence of infrastructural facilities on students' performance in colleges of education in Kaduna State. Research questions as well as hypotheses were in line with the raised objectives of the study. Copious related literature was reviewed based on the raised objectives. Descriptive survey research design was employed and data was collected through the use of self-constructed questionnaire. The population of the study was one thousand and sixty nine (1069) lecturers; forty two (42) non-teaching staff and twelve (12) management staff. Random sampling technique was used to draw sample from two public colleges of education in Kaduna State. Therefore, the sample of the study was one hundred and fifty six (156) lecturers; six (6) non-teaching staff and two (2) management staff. The content of instrument was validated by expert. The reliability was obtained at 0.77. The collected data was presented in frequency, percentage and analyzed using (ANOVA) statistical technique at 0.05 significant level.

**Keywords:** Stakeholders', Perceptions, Physical Structure Performance

### Introduction

School physical environment like beautification of school premises with flowers, planning of trees erecting national flag, national symbols, painting, maintenance, watering and cutting of flower and grasses etc the school environment, which include the classroom, libraries, technical workshops, laboratories, teachers quality, school management, teaching methods, fees etc are variables that effect students' academic achievement" (Ajayi, 2001 and Oluchukwu 2000). Hence, the school environment remains an important issue that should be situated and well managed to influence the students' performance.

Meanwhile, School environments vary greatly. whereas some schools are friendly, inviting and supportive, others are exclusively, unwelcoming and even unsafe. The feelings and attitudes that are elicited by a school's environment are referred to as school climate (Loukas, 2001) in Saleh and Fatima (2015). According to Beady (2003) school climate reflects the physical and psychological aspect of the school that are more susceptible to change and that provide the preconditions necessary for teaching and learning. Comer (2003) agrees that it is a multidimensional construct that includes physical, social and academic dimensions.

However, School infrastructural facilities consists of accessible roads to schools, well positioned classrooms (lecture-rooms, lecture-theaters), sound teaching equipment's, effective interaction between instructors and instructed and entrap convince among the students sitting space are very crucial for desirable performance of the students in any educational organizations.

## **Statement of the problem**

Unfriendly school physical environment: overcrowded lecture hall, many students receive lecture without adequate chance to earring and ask questions which hamper their lesson comprehension. Many Colleges of Education in Kaduna States face depreciating atmosphere which deregulate desired students' performance.

Egregious infrastructural facilities which include roads, buildings, location of the schools have negative influence on the students' performance in Colleges of Educations in Nigeria. For instance, if the school is located in were the students could not ingress in to the school easily as a result of bad roads, or buildings the students would be discouraged. In relation to this statements, Bridget, (2013). Implies that no effective or meaningful school curriculum activity can exist without infrastructure for teaching and learning. This is because facilities enable the learner to develop problem solving skills and scientific attitudes which are useful in national building.

## **Objectives of the Study**

1. Assess the influence of physical environment on students'' performance in Colleges of Educations in Kaduna State, Nigeria; and
2. Find out the influence of infrastructural facilities on students'' performance in Colleges of Educations in Kaduna State, Nigeria.

## **Research Questions:**

1. How does the physical environment influence students' performance in Colleges of Educations in Kaduna State Nigeria?
2. How does the of infrastructural facilities influence on students' performance in Colleges of Educations in Kaduna State, Nigeria?

## **Research Hypotheses**

H01: There is no significant difference in the opinions of stakeholders (lecturers, non-teaching staff and Management staff) on influence of physical environment on students'' performance in Colleges of Educations in Kaduna State, Nigeria.

H02: There is no significant difference in the opinions of stakeholders (lecturers, non-teaching staff and Management staff) on influence of infrastructural facilities on students'' performance in Colleges of Educations in Kaduna State, Nigeria.

## **Review of related literature**

A Colleges of Educations physical environment includes the Colleges buildings surrounding grounds, such as noise, temperature, and lighting as well as physical, biological, or chemical agent a learning increase in the number of students with problem that may, in put, be affected by poor physical conditions in the Colleges. In this regard, O Neil (2000) notes that these factors include temperature, ventilation, lighting, color and noise level. These elements produce comfort and irritation, either of which can affect behavior of Colleges' students''.

## **Influence of Physical Facilities in Colleges of Educations**

Investment in Colleges building involves great deals of capital out lay and therefore the proper care of these buildings is a very importance, administrative task. Again, the health of pupils and lecturers who occupy them may be affected by the amount of care that is taken. This should include those routine activities which ensure the daily smooth running of the Colleges. Cleaning of the buildings and beautification of the classes (lecture-rooms& lecture-theatres) with colours and pictures and lands, distributing supplies, locking and unlocking of classrooms, offices and stores. These should also be schedules of work showing what is to be done by whom at what time and under whose supervision. Olagboye (2004) view management of school. Physical facilities as the process of planning,

construction, utilization of all school physical facilities.

Element of Physical Facilities for Fostering Peace in Classroom (lecture-rooms and lecture-theatres )

It is cleared that the classroom interaction plays an important role in learning. Scott (2013) clustered these interactions in three: students' participation, classroom discipline and management, and satisfaction.

i. Students Participation: Beliefs and theories about how children learn are also changing ideas about what school and classrooms should be like. In that regard, Lederach (2005) believe that people do not learn by having information and transmitted to them, buy creating their own knowledge while some people are able to do this by listening to a lecture or reading a textbook, many others must have direct experiences and opportunities to talk about their ideas in order to understand what they learn. Constructivist approach is based on the premises that learning is most effective when "the learners is actively engaged in creating his/her own knowledge and understanding by connecting what is being learned with prior knowledge and experiences" (Lopez,2001).

ii. Classroom Control and Discipline: Education need to develop a vision of the peaceful classroom environment with their student from the first day of class. The whole group of the students would discuss, negotiate and adopt this vision in order for all students to share and value it. Rule of conduct and expectation will evolve from this collective vision (Scott, 2013). Many teachers worry that allowing student to take on new role and responsibilities means that they will not be able to control the classroom, this is not the purpose or the outcome of the encouraging the students to take more active role. Rather than giving up other and discipline or giving student's free rein, the teacher empowers students to participate in making decision about their behavior, (Henderson et al, 2000).

iii. Student Satisfaction: Another important element of physical facilities is students' satisfaction. Alausa (2007) studied the element of a classroom as a science environment centered on sharing knowledge and found that student are actively evolved in making decision, planning and organizing activities, and establishing classroom norms, this make it possible for student to become satisfied with lesson, share idea and build on the thinking of others, even when the initials feel individual ownership of materials and idea. Students who are accustomed to a competitive environment in the classroom will need time to adjust to a community approach. Teachers should provide a helpful model for establishing a sense of peace and satisfaction among student. This demands initiating a caring community in the class. In caring community, all members are important, and everyone has significant contribution to make both to learning and to the generally wellbeing student repeat that a sense of being known and of being of peace with other students leads to a more congenial learning environment and increased motivation to learn and participation in school (Labate, 2001).

### **Influence of Infrastructure Facilitates on Students Performance**

Infrastructures refer to the basic physical structures and facilities often government- owned, needed for the effective operation of society or economics and education. Infrastructure facilities are essential to enable, sustain or enhance societal living conditions. More specifically infrastructure facilitate the production of goods and services, the distributions of finished products to markets, and provision of basic social service such as schools and hospitals public works and public capital are common terms for government owned infrastructures assets and facilities.

Moreover, infrastructure is specious classroom with adequate suitable furniture, arts Centre, large specious hall for conferences, dance classes, exclusive halls, conducting dance, music (vocal and instrumental), drawing and crafts classes. Halls for English Language activity Centre for classes. Five audio visual rooms to enable computer aided teaching, mathematic labs classes, computer lab, a specious air conditioned ups supported computer lab with many computers, A specious junior computers lab. Lecture hall with a seating capacity of one hundred and fifty (150) where lectures, workshops and in-service programmes are conducted. In line with the above, Oyedej in Durosaro and Ogunsaju (2000)

define school plant' to include the site, the building and other infrastructures'. He went further to say that "school plant embraces permanent and semi-permanent structures which include items such as machines, laboratory equipment, the chalk board and office assistances tools as brooms and cleaning materials.

**Methodology**

The study adopted descriptive survey design; The population was made up of a total of one thousand six hundred and nine (1069) lecturers, forty two (42) non-teaching staff and twelve (12) managing staff in colleges of Educations in Kaduna State. The sample of the study consisted of one hundred and fifty six (156) lecturers, six (6) non-teaching staff and two (2) management staff. This was done through stratified random sampling technique. constructed questionnaire was administered for data collection on the influence of colleges of Educations location on student's performance in Colleges of Educations in Kaduna State.as it seeks to solicit opinions of respondents under the prevailing circumstance, in which structured questionnaire was used to collect relevant data (opinions) from selected samples (lecturers, non-teaching staff and Management staff) within the population. This design is appropriate because in the opinion of Anyanwu (2003), who stated that descriptive survey research possess' great relevance for adoption when a researcher intends to describe conditions that already exist in the target area of the study. The results eventually used in the final analysis and making generalizations on the whole  
 Methods of Data Analysis: The data collected from the respondents was compiled and tabulated in chapter four using frequency and percentage. Interpretation of data analysis was made for table. The raw scores from the frequency was converted to percentages through the descriptive statistical techniques. At the end, to test the postulated hypothesis of this research, inferential statistics of Analysis of Variance was employed to analyze the data. While the hypothesis was tested at 0.05 significance.

Presentation and analysis of collected data on

**Influence of Physical Environment on Students Performance in Colleges of Educations in Kaduna State, Nigeria.**

This section covers item 1 to 5 in the questionnaire. It presents analysis of the respondents' responses using simple percentage and frequency table. Details of the responses by lecturers, non-teaching staff and Management staff were vividly explained in table1.

**Table 1: Opinions of Respondents on Influence of Physical Environment on Students' Performance in Colleges of Educations**

RESPONSES											
S/N	Item Statement	Category of Respondents	Agree		Undecided		Disagree		Total		
			F	%	F	%	F	%	F	%	
1	Conducive and friendly atmosphere of the colleges of Educations influences students' performance.	Lecturers	273	93	8	3	13	4	294	100	
		Non-teaching staff	67	76	1	1	20	23	88	100	
		Management staff	66	80	*	*	17	21	83	100	
2	Spatial theatres/lecture-rooms with adequate ventilation and good sitting spaces influence students' performance.	Lecturers	264	90	9	3	21	7	294	100	
		Non-teaching staff	57	65	1	1	30	34	88	100	
		Management staff	66	80	3	4	14	17	83	100	
3	Beautification of colleges of Education structures normally attracts the public attention and influences on	Lecturers	245	83	18	6	31	11	294	100	
		Non-teaching staff	56	64	7	8	25	28	88	100	
		Management staff	61	74	12	15	10	12	83	100	

4	students’’ performance. Planting trees and flowers in colleges of Educations 1 provides gorgeous environment and compels influential performance from students in the colleges.	Lecturers	219	75	39	13	36	12	294	100
		Non-teaching staff	46	52	9	10	33	38	88	100
		Management staff	36	43	25	30	22	27	83	100

From table 1, there was a congruent of opinions among lectures, non-teaching staff and Management staff in responses to item 1-4. Item 1 asked if conducive and friendly atmosphere of Colleges of educations influences on students’’ performance. It was found that 93% of lecturers, 76% of non-teaching staff and 80% of management staff agreed with the statement. In item 2, attempt was made to find out whether spatial lecture-rooms with adequate ventilation and good sitting spaces influence on students’’ performance. The result indicated that 90% of lecturers, 65% of non-teaching staff and 80% of management staff agreed with the idea. In relation to item 3, the total number of 83% of lecturers, 64% of non-teaching staff and 74% of management staff agreed that beautification of colleges of Education structures normally attracts the public attention and influences on students’’ performance. Whereas, in item 4, it was only 75% of lecturers and 52% non-teaching staff agreed that planting of trees and flowers in Colleges of Educations provides gorgeous environment and compels influential performance from students in colleges of Educations. While, 57% of management staff argued the idea. From the above opinions, the researcher discovered that physical environment of the colleges of Educations is dire service which will affect students’’ performance. Meanwhile, making colleges of Educations in amiable environment is duty Federal, State Government and other stakeholders to encourage the conducive colleges of Educations’ environment in order to enhance students’’performance in the Colleges.

Influence of Infrastructural Facilities on Students’ Performance in Colleges of Educations in Kaduna State, Nigeria. This section covers items 6 to 10 in the questionnaire. Details of the responses by Lecturers, non-teaching and Management staff were explained in table 2.

**Table 2: Opinions of Respondents on Influence of Infrastructural Facilities on Students’ Performance in Colleges of Educations**

S/N	Item Statement	Category of Respondents	RESPONSES							
			Agree F	Agree %	Undecided F	Undecided %	Disagree F	Disagree %	Total F	Total %
5	Provision of adequate lecture-rooms/theatres influences on students’ performance in Colleges of Educations in North West, Nigeria	Lecturers	268	91	4	1	22	8	294	100
		Non-teaching staff	66	75	6	7	16	18	88	100
		Management staff	62	75	7	8	14	17	83	100
6	Availability of functional toilets facilities plays vital roles and improves students’ performance in colleges of Educations. .	Lecturers	241	82	28	10	25	9	294	100
		Non-teaching staff	60	68	7	8	21	24	88	100
		Management staff	62	75	6	7	15	18	83	100
7	Adequate water supply influences on students’ performance in colleges of Educations.	Lecturers	253	86	23	8	18	6	294	100
		Non-teaching staff	55	63	26	30	7	8	88	100
		Management staff	66	80	7	8	10	12	83	100

			staff								
8	Through provision of	Lecturers	260	88	16	5	18	6	294	100	
	equipped laboratory	Non-teaching	72	82	7	8	9	10	88	100	
	students' performance	staff									
	can be influenced in	Management	68	82	8	10	7	8	83	100	
	Colleges of Educations. .	staff									

Table 2, showed congruent in the opinions of Lecturers, non-teaching staff and Management staff in response to item 5. The item attempted to find out whether provision of adequate lecture-rooms influence students' performance in Colleges of Educations in North West of Nigeria; the responses showed that 91% of lecturers 66% of Non-teaching staff and 62% of Management staff agreed with the statement respectively. Likewise, item 6 attempted to find out whether availability of toilets plays vital roles and improves students' performance in Colleges of Educations, the discovered result showed that 82% of lecturers, 68% of non-teaching staff and 75% of Management staff agreed with the idea. Hence, item 7 investigates whether adequate water supply influences on students' performance in Colleges of Educations ; the opinions of the respondents showed that 86% of Lecturers, 63% of non-teaching staff and 80% of Management staff agreed with the statement. In item 8, opinions of respondents were asked whether thorough provision of equipped laboratories influenced on students' performance in Colleges of Educations. It was found that 88% of lecturers, 82% of non-teaching staff and 82% of Management staff agreed with the idea. Base on the responses, the researcher arrived at magnificent of infrastructural facilities on students' performance in Colleges of educations. Therefore, the Federal Government through ministry of Education and State Government through ministry of Education should make availability of this item in order to encourage desirable performance from the students.

**Hypotheses Testing**

This section presents summary of hypotheses testing in line with raised objectives and null hypotheses of the study. The parametric statistics of Analysis of Variance (ANOVA) was used in the analysis of the data at 0.05 significant levels. Two hypotheses were formulated and tested. Hypothesis was retained when the probability value was more than 0.05 significant levels. While, hypothesis was rejected when the probability value is lower than the level of significance. Details of these are as follows:

**Hypothesis 1:** There was no significant difference in the opinions of lecturers, non-teaching staff and Management staff on the influence of physical environment on the students' performance in Colleges of Educations in Kaduna State, Nigeria.

**Table 3: Summary of Analysis of Variance on the Opinions of Respondents on the Influence of Physical Environment on the Students' Performance in Colleges of Educations in North West, Nigeria.**

Variable	Sum of Squares	Df	Mean Square	F	Prob.	Critical value
Between Groups	1793.529	2	896.764			
Within Groups	24108.721	462	52.183	17.185	.000	2.34
<b>Total</b>	<b>25902.249</b>	<b>464</b>				

From table 3, the result of the test revealed that the f-ratio value (17.185) at 2 df 464 and at the level 0.05; the critical value (2.34) is greater than f-ratio values (17.185), the observed probability level of significance P(.000) is lower than .05. This means there is a significant difference in the opinions of lecturers, non-teaching staff and management staff on the influence of physical environment on the students' performance in Colleges of Education. Therefore, the null hypothesis is rejected.

**Hypothesis 2:** There was no significant difference in the opinions of lecturers, non-teaching staff and management staff on the influence of infrastructural facilities on the students’ performance in Colleges of Educations in Kaduna State, Nigeria; The outcomes are presented in table 13:

**Table 4: Summary of Analysis of Variance on the Opinions of Lecturers, Non-teaching staff and Management staff the Influence of Infrastructural Facilities on the Students’ Performance in Colleges of Educations in Kaduna State, Nigeria.**

Variable	Sum of Squares	Df	Mean Square	F	Prob.	Critical value
Between Groups	1931.720	2	965.860			
Within Groups	25480.439	462	55.152	17.513	.000	2.34
<b>Total</b>	<b>27412.159</b>	<b>464</b>				

From table 4, the result of the test revealed that the f-ratio value (17.513) at 2 df 464 and at the level 0.05; the critical value (2.34) is greater than f-ratio values (17.513), the observed probability level of significance P(.000) is lower than .0.05. This means there is a significant difference in the opinions of lecturers, non-teaching staff and Management staff on the influence of infrastructural facilities on the students’ performance in Colleges of Educations in North West, Nigeria. Therefore, the null hypothesis is rejected.

**Findings**

- i. Conducive Colleges of Educations environment with ventilation and full mansion lecture-rooms influences on students’ performance in Colleges of Educations in Kaduna State, Nigeria;
- ii. Adequate construction of roads, buildings, such as: lecture-rooms, lecture theatres, libraries and libraries influence on students’ performance in Colleges of Educations in Kaduna State.

**Discussions of the Findings**

From the data collected, most of the respondents are unanimously agreed that provision of spaces may influence on teaching and learning process and enhance on the students’ performance within the colleges. It is likely that well planned school physical plants in terms of location structure and facilities will facilitate effective teaching and learning process and yield better students’ performance in the colleges of Educations in Kaduna State, Nigeria.

It was found that adequate construction of roads, lecture-rooms lecture-theatres influence on students’ performance in Colleges. From the opinions of most of the respondents, it was deduced that Federal and State Government has been making more effort in the provision of conducive learning environment and infrastructural facilities in many colleges. But they should do more effort in such provision so as to enhance teaching and learning conditions throughout their own colleges.

**Recommendations**

The study recommended that Federal and State Government as well as other stakeholders should provision of conducive environment for enhancement of teaching and learning activities in the Colleges of Educations.

The study recommended that Federal and State Government and related stakeholders, should make adequate construction of infrastructural facilities in colleges of Educations so as to yield maximum educational outcomes from the students.

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