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# THE IMPACT OF EDUCATIONAL FACILITIES ON STUDENTS' TEACHING/LEARNING PROCESS IN ABEOKUTA, OGUN STATE, NIGERIA: NEED FOR COUNSELLING APPROACHES

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#### Abstract:

The main thrust of this study was to examine the impact of educational facilities on students' academic performance in Abeokuta North Local Government Area of Ogun, Nigeria. To achieve the purpose, two null hypotheses were formulated to direct the study. Literature review was carried out accordingly. Ex-post facto research design was adopted for the study. A sample size of five hundred and fifty secondary schools students were randomly selected, through the simply random sampling techniques. The questionnaire was the main instrument used for data collection. The reliability estimate of the instrument was established through the test-re-test method. Independent t-test analysis was the statistical analysis adopted to test the hypotheses. Each hypothesis was tested at .05 level of significance. The result of the analysis revealed that good classroom buildings and the use of ICT significantly affect students differently in their academic performance. Based on the findings, it was recommended that adequate well structure classroom buildings and the use of ICT in teaching and learning process should be made available for all school. Also, learners should be encouraged to take active part in the learning process with computers.

Keywords: educational facilities, teaching/learning process, counselling approaches

#### 1. Introduction

Educational environments are usually established for the purpose of teaching and learning. This purpose may however not be achieved when the constituting components of educational environments like school buildings, library facilities, furniture items, instructional materials, lighting, and so on, are either not available inadequate or properly structured and organized. The Nigerian National Policy on Education (NPE, 2004) expects the secondary school level of education to be given in two stages and to be six years duration. The first stage is JS 1 - 3 while the second stage is SS 1 - 3. In order to achieve the objective, it is obvious that the needed resources (physical and human) of such an organization must be harnessed for effective implementation process (Nkang, 2000).

The researcher's interest in this area stem from two factors: The first is the apparent lack of awareness on the part of some education planners regarding the relationship/correlation of the use of educational facilities with students' performance. The second is the attitude of those government agencies and some education planners towards the provision of the required educational facilities as well as the need to maintain those already provided. Perhaps a third factor for understanding research in this area is counselling approaches are not adequately applied in the teaching/learning situations in all learning activities.

Counselling deals with the process of helping, directing, assisting an individual(s) with problems in their educational, vocational and personal social needs to resolve their differences within and outside his environment and forge ahead with their normal life or learning process. Therefore, the quality and quantity of school environment like building structure, general condition of learning and equipment create a great impact in the teaching/learning situation of the child. Hence, a man is the product of his environment (parents, teachers, students and school system). Parents for instance hold the view that if buildings and other learning facilities are adequate, well maintained and utilized in the school setting, also the care and seriousness would be pass on to the academic activities of the institution. Thus, the external configuration of the school, the quality of academic programmes of a school could reasonably be assessed based on the facilities and the nature of the environmental condition of the school in question. It is on this basis that Nuhu (2003) points out that serious attention should be given to the provision of good and workable school buildings, equipment, facilities and educational processes and methodology applied within the system.

Moreover, the recent development in Nigerian system of education, in relation to population and the UBE programmes is imperative for the government to improve the

standard and quality of classroom buildings and provision of other physical facilities. This in essence will help to promote effective teaching and learning in our schools (Umoren, 2001).

This therefore has necessitated updating school curriculum and programmes to move at the same space as the modern learning facilities. Again, modern learning facilities like computers, information and communication technology (ICT), internet, slides magnetic board, interactive whiteboard and plasma screen, TV, etc must be made available and also use it for teaching process, (Morrish, 2002). School facilities consist of educational facilities, which include the hardware and software of the organization such as buildings, the library, furniture, textbooks, the laboratory, school equipment. While the software include the visual teaching aids, instructional materials like magnetic tapes, films, transparency, computer assisted instruction (CAI), internet and ICT. The effective utilization and implementation of these learning facilities in teaching social studies depends on its availability and competence of the teachers (Fayose, 2004). In today's school environment, there exist differences in classroom building structures, instructional resources, library facilities, furniture, computer, internet, information communication technology (ICT), laboratory equipment, social studies resource centre and the teacher who are the promoters and motivators of students' interest in learning (Uline, 2000; Nzeribe, 2002).

The term educational facilities means the entire scope of human, physical and social infrastructure provided in the school for the purpose of teaching/learning process (Okokoyo, Nwaham & Ikpeba, 2002). Odor (1995) describes educational facilities as physical resources which the school administrators and his reference group harness, allocate, utilize and maintain for the purpose of effective school administration that will facilitate teaching/learning process in social studies.

Educational facilities are those materials that enhance teaching/learning processes. The further stated that educational facilities refer to buildings as well as items such as machines, laboratory equipment, chalkboard and learners' tools. They are those things which enable a skillful teacher to achieve a level of instructional objectives that far exceeds what is possible when they are not provided (Earthman, 2002; Adeipe, 2007; Fabiyi & Uloka, 2009). Therefore, the planning and designing of educational facilities for schools, colleges and universities possess a greater influence on the performance outcome of social studies students. This is certainly true, because deferred maintenance of the educational facilities whether human resources (e.g. teachers), social or physical facilities and inadequate provision of these facilities can create deteriorating environment such as dilapidated buildings, peeling paint, crumbling plaster, broken

furniture and non-functioning learning facilities. This of course, affects students learning habit and staff morale.

Though educational system in Nigeria has witnessed tremendous increase in the area of expansion and students' enrolment within the past two decades in the midst of limited materials and dilapidated educational facilities, these problems still linger within the Nigerian school system, without a corresponding increase in the area of learning facilities (Higgins, Hall, Wall, Woolner & McCaughey (2005).

Based on this, the researchers are motivated to investigate the impact of educational facilities on teaching/learning situation in relation to the following variables like classroom building, information and communication technology (ICT), computer assisted instruction (CAI) and internet services.

# 2. Theoretical framework

The theory adopted for this study was social learning theory by Bandura and Walters (1977). This theory is based on modeling and limitation, the belief that learning occurs through observing other people, things and events in the environment. The information gained from observing other people influence the way we act (Elliot, Kratochwill, Cook & Travers, 2000). Another major assumption of this theory is that, for learning to take place, learners must interact with the environment. There should be a significant relationship between the learner and the environment.

Bandura (1986) believes that learning takes place in a social context; that is through interaction. Children learn about somebody or something, from something or somebody. Thus, this theory is commonly referred to as observational or imitation theory. The relevant of this theory is that students learn how to use different educational facilities and get rewarded with good results or learning outcome.

# 3. Statement of the problem

A cross-section of the public, student, teachers, educational authorities, curriculum planners and government officers express growing concern over the alarming rate of students' low performance in school. Parents blame teachers, teachers blame parents and government and policy makers has their share of blame on students' academic and learning process.

Despite the fact that measures are being taken to improve the educational system in Nigeria, attractive and functional, the system is facing serious challenges and decay. This decay has not only been in terms of curriculum content or devotion of teachers to their duties but also in terms of the deteriorating state of facilities. This decay has lasted for many years. For instance, most roofs of classroom buildings have been ripped open by wind, storm, leaving the classrooms bare and exposed to damage by environmental elements like rain, sun and human factors.

Moreover, the educational sector in Nigeria has experienced rapid expansion in the area of enrollment in the midst of scare/inadequate resources and dilapidated educational facilities without a corresponding increase in teaching and learning facilities. This recurrent situation makes our children to study in the open or under the trees, in empty classroom in addition to using non-functional instructional materials. Again teaching aids are not available in many schools and even where a few are available, they are rarely used by teachers in their classes. Other modern facilities like computers, internet and interactive board are also rare in most of these schools. Where they exist, there may be only one in 100 schools. School libraries appear to exist only in name with no current and recent textbooks and trained librarians to manage them.

Based on these, the study is set out to investigate the availability and usage of these facilities in schools in the teaching/learning process. The study therefore, intends to examine the differences in academic performance of students taught with the available educational facilities and those taught without any educational facilities.

#### 3.1 Purpose of the study

The purpose of the study was to examine the impact of educational facilities on students' teaching/learning process in Abeokuta, Ogun State.

Specifically, the study has the following objectives:

- 1. To determine the difference in academic performance of students taught with good classroom building and those taught without good classroom buildings.
- 2. To assess the difference in academic performance of students taught with the use of information and communication technology (ICT) and those taught without using ICT programme.

Research questions were raise as follows: To what extent do the academic performance of students' taught with good classroom building and ICT programmes differs from those taught without good classroom building and ICT programme in teaching/learning process.

The hypotheses raise in answer to the research questions were formulated as: There existed no significance difference in academic performance of students taught with good classroom and ICT programme and those taught without good classroom building and ICT programmes in the teaching/learning process. The scope of the study is restricted to junior secondary school in Abeokuta north local government area, Ogun State. The study examined the impact of educational facilities on students' teaching/learning process in Ogun State. It also focused on how the availability and usability of some physical facilities like classroom building and ICT-computer assisted instruction and internet services influences JSS 1-3 students' academic performance. Ten (10) public secondary schools in Abeokuta north were used for the study.

# 4. Literature review

Literatures related to the study were reviewed based on the hypotheses set for the study.

# 4.1 Availability and usability of classroom buildings on students' academic performance

The classroom is the heart of any educational system. There is no curriculum or educational planning that is complete without a gradual development of structure that will enhance the implementation process. Generally, most of the learning activities take place in classroom, which is usually included in the building structure, sitting arrangement also is important, and implementation commences when students are well seated in the classroom. Attention is given to classroom space, because it enhances effective teaching and learning process.

School buildings are important educational facilities, which must be present for the achievement of any learning activity and execution of any educational programme as it provides accommodation and protection for human and material resources like educational equipment and facilities. Learning activities cannot be effective without the essential buildings in the school. School buildings include classroom, libraries, staffroom, laboratories, hostel, assembly halls, the kitchen, toilet facilities, health centre and others for effective and conducive teaching/learning environment (Agron, 2003). The building must be provided by the government or in the case of private schools, the proprietor should provide standard structures, they should be adequate and properly maintained (Okokoyo, Nwaham & Ikpeba, 2004).

Earthman (2004) considered overcrowding as the most deteriorating effect that affect academic performance of students in schools. According to his view, chronic noise exposes and hinders cognitive functioning and impairs pre-reading and reading skills. As is obvious from this view, it means that the state of the classroom in a school can have some negative effect on students' behavioural patterns; such behavioural patterns include vandalism, absenteeism, suspension, disciplinary incidents, violence and smoking. Therefore, various aspects of research report on the nature of physical facilities revealed that healthy and well-established learning environment help in promoting students' capacity in learning, thus, enhancing students' academic performance (Fisher, 2001; Schneidner, 2002; Earthman, 2004).

Another aspect of building design factor found having a possible relationship between students' academic performances are the amount of space allocated per student, the openness of the space, less facilities, class size, building utilization, window and room occupancy. These factors may cause overcrowding, which is dangerous to health and learning activities. According to Crook (2005); O'Sulivan (2006), children or students who are subjected to this type of building conditions are found to record low academic performance. While those exposed to better academic building condition accorded good learning space are found to record high academic performance. Therefore, the design of the classroom should be built in a way that scientific instrument are viewed from the corridor. Hence designing a classroom with all facilities helps in educational advancement of the child, likewise the society.

### 4.2 Availability and usability of ICT on students' performance

Information is knowledge acquired or derived. It is interpretation given to data which is used to describe mankind accumulated knowledge derived from learning activities and structured to be of value in planning and decision making; in the execution of projects, monitoring of programmes and in the evaluation of public and private sector operation of a nation (Zhang & Aikman, 2007; Okon, 2004). Access to precise and reliable information at the right time can lead to the right decision and minimize wastage of resources and avoidable risks. Also access to information can improve individuals' and organizations' choice and opportunities (Lefebvres, Deaudelin & Loiselle, 2006).

The computer is the core essential requirement for ICT, it is an automatic electronic device which works under the control of stored programme and which accepts data from an input device, performs arithmetic and logical operations in accordance with an output device for printing – receiving input or data, processing and controlling the data, storing and producing output or result (Saka & Akdeniz, 2006). Other ICT devices, facilities and strategies which use the computer include the internet, the electronic mail (email), virtual library, computer assisted instruction (CAI) and mobile phone (GSM). These have been in use in many industrialized countries to individualized instruction in and out of the school, for greater performance achievement by learners.

Again, it is through ICT that individual learners can seek explanations, compare experiences, investigate problems, reflect reasons and learn many concepts in the school curriculum. Through ICT learners would learn how to think logically about what they have learned, thereby developing the spirit of self-reliance and confidence in themselves. This therefore, involved the acquisition of skill that enable the learners seek knowledge in and out of the school, and effectively make use of such knowledge acquired through ICT. This has become a major focus of education globally (Empirica, 2006).

Presently, in Nigeria, though, there appears to be too little effort on the part of policy makers to integrate ICT into our educational system. The computer which serves as the basic instrument for ICT is still unknown to a great majority of our primary and secondary school pupils/students and teachers especially in rural areas (Korte & Husting, 2007).

This situation has been extended to the tertiary level of education. Most students and teachers are exposed to computer not because they know how to use it, but because they have opportunity to pay for the services of private own computer within and out of the school. Such paid services are mainly limited to work processing of assignment, processing of data for projects and research and downloading scanty information for this study (Bingimtas, 2009).

Since Nigeria (Ogun State inclusive) system of education is facing this challenges of ICT setback programme and lack of available computers, it therefore, implies that students and teachers have no access to information and experiences through global networks and pools of knowledge is limited. Hence, students rely on content information recycle in poorly written textbooks. Also, teachers do not have access to global data base on their various areas of specialization. As a result of this lack of exposure and unavailability of these modern facilities, they cannot make use of the modern information super highway, the internet. Based on this fact, Nigeria teachers, even in this age of information revolution made possible by ICT, still rely on and massively adopted the orthodox talk and calk method of instrument delivery without realizing that computer is fast becoming the chalkboard of tomorrow (Meechin & Zaitun, 2006).

The situation affect learners, mostly the Nigerian students in secondary schools continue to depend entire on their teachers and available texts and so instructional strategies continue to be teacher-centred. Again curriculum implementation strategies therefore cannot be said to be leading to capacity building and empowerment to meet the objective of globalization generally and specifically meet the millennium development goal which is targeted toward significance human development by the year 2015 (UNDP, 2004).

ICT have recently gain ground well of interest, it is a significant research area for many scholars around the globe. Their nature has highly changed the face of education over the last few decades. For most European countries, the use of ICT in education and training has become a priority during the last decade. However, very few has achieve progress, indeed a small percent of schools in some countries achieve high level of effective use of ICT to support and change the teaching and learning process in many subject areas. Others are still in the early phase of ICT adoption. Hence, schools with sufficient ICT resources achieve better result than those who are not well equipped. There is a significant improvement on learner's performance. Finally, teachers become more convince that educational achievements of pupils are due to good ICT used. Teachers in Europe stated that 86% of pupils are more motivated when ICT are used for teaching/learning process (Elmaifi, 2014).

# 5. Methodology

The design adopted in this study was ex-post facto research design. The design is adopted because the researcher does not have direct control of the independent variables. The variables are inherently non-manipulated.

#### 5.1 Area and population of the study

The study was conducted in Abeokuta North Local Government Area of Ogun State, Nigeria. The population of this study consisted of one thousand, six hundred and eighty (1,680) junior secondary school students selected from ten (10) public secondary schools in Abeokuta North Local Government Area of Ogun State. The data was obtained from State Secondary Education Zone 2015/2016 sessions.

# 5.2 Sample and sampling technique

The simple random sampling technique was used to select the five hundred and fifty (550) junior secondary students for the study.

#### 5.3 Instrumentation

The researchers' made instrument was developed for the study, which was, educational facilities questionnaire (EFQ), which as designed and build around the objectives and research questions of the study. The EFQ consisted of two sections: A and B. section A sought information about personal data of students such as age and sex. Section B

sought to elicit information on educational facilities such as classroom buildings and ICT. The instrument comprised 12 items all of the likert type 4 point scale (strong agree, 4 points; agree, 3 points; disagree 2 point and strongly disagree, 1 point).

In terms of validity, the instrument were subject to face and content validity by experts in measurement and evaluation and psychology in the department of educational foundations, who confirmed that the instrument was suitable for measuring what they were purported to measure. Test re-test method of reliability was used to determine the reliability estimates of the instrument, using 50 junior secondary school students drawn from the population who were not used in the main study. The reliability index of 0.71 and 0.82 was obtained indicating high reliability.

#### 5.4 Data collection

With the assistance of class teachers, the instruments were administered to the subjects in the sampled schools and a thorough explanation was given to the students. All the 550 copies of the instrument were retrieved and were properly completed making a total of 100% return.

#### 5.5 Analysis of data and result

The data collected was analyzed using the independent t-test analysis of the difference in the performance. The result is presented for each hypothesis.

# A. Hypothesis one

There is no significant difference between the performance of students using good classroom building and those taught without good classroom building. The independent variable involved in this hypothesis is classroom buildings while the dependent variable is students' performance. To test this hypothesis, academic performance of students taught using good classroom buildings and those taught without good classroom buildings were compared using the independent t-test analysis. The result of the analysis is presented in Table 1.

**Table 1:** Independent t-test analysis of the difference in the performance of students taught using good classroom building and those taught without classroom building (N = 550)

00	0	0			U V	,
Variables			Ν	X	SD	t-value
Students taught using good cl	lassroom buildings		220	20.31	1.68	
						-11.00*
Students taught without good	l classroom buildings		330	21.90	1.66	
* significant at .05 level, critica	al t = 1.96, df = 548					

The result in Table 1 indicates that calculated t-value of -11.00 is higher than the critical t-value of 1.96 at .05 level of significance with 548 degree of freedom. With this result, the null hypothesis was rejected. This implies that there is a significant difference in the performance of students taught using good classroom building and those taught without good classroom building in teaching/learning process.

### **B.** Hypothesis two

There exist no significant difference between the performance of students taught with the use of ICT and those taught without any ICT programme. The independent variable involved in this hypothesis is ICT programme, while the dependent variable is students' performance. To test this hypothesis, the academic performance of students taught using ICT programme and those taught without ICT programme were compared using independent t-test analysis. The result of the analysis is presented in Table 2 below

**Table 2:** Independent t-test analysis of the difference in the performance of students taught using ICT programme and those taught without ICT programme (N = 550)

0 1 0 0	1 0				
Variables	Ν	X	SD	t-value	
Students taught using ICT programme	221	20.61	2.13		
				-7.15*	
Students taught without using ICT programme	239	21.71	1.48		
* significant at 05 lovel critical $t = 1.96$ df = 548					

\* significant at .05 level, critical t = 1.96, df = 548

The result in Table 2 indicates that calculated t-value of -7.15 is higher than the critical t-value of 1.96 at .05 level of significance with 548 degree of freedom. With this result, the null hypothesis was rejected. This implies that there is a significant difference in the performance of students taught using ICT programme and those taught without ICT programme in teaching/learning process.

In summary, there exist a significant difference in the performance of students taught using standard classroom buildings and those taught without the use of standard classroom building. Likewise, the performance of students taught with the use of ICT and those taught without the use of any ICT programme.

# 6. Discussion of findings

The discussion of findings that emerged from the results of the analysis are presented according to the variable of the study:

A. Good classroom building and students' performance

The result of this hypothesis in Table 1 indicated that students' taught using good classroom building difference significantly in their performance from those taught without good classroom building. The finding accords with the view of Earthman (2004), which considered overcrowding as the most deteriorating effect that affect academic performance of students in schools. According to his view, chronic noise exposes and hinders cognitive functioning and impairs pre-reading and reading skills. It can create negative effect on students' behavioural patterns, such as vandalism, absenteeism, suspension, disciplinary incidents, violence, abuse and smoking.

Therefore, various aspects of research report on the nature of physical facilities revealed that healthy and well established learning environment help in promoting students capacity in learning. The result of the hypothesis two indicated that, students taught using ICT programme differ significantly in their performance from those taught without ICT programme. The findings of this study is in agreement with the view of Empirica (2006) who observed that it is through ICT that individuals learners can seek explanation, compare experiences, investigate problems, reflect reasons and learn many concepts in the school curriculum. By this, it means that through ICT learners would learn how to learn and think logically on what is learned; thereby developing a spirit of self-reliance and confidence in themselves. This therefore involved the acquisition of skill that enable the learners seek knowledge in and out of the school and effectively make use of such knowledge acquired through ICT. This has become a major focus of education globally. Hence, the use of ICT device in teaching and learning process enhance positive effect on the learner. Also, ICT in instructional situations have been recorded in the areas of reduction of disciplinary problems and absenteeism by making classroom studies more interesting.

# 7. Conclusion

Based on the findings of the study, it was concluded that, students taught using good classroom building differ significantly in their performance from those taught without standard classroom building in teaching/learning process. Likewise, students taught using ICT programme differ significantly in their performance from those taught without any ICT programme.

#### 8. Recommendations

The following counselling recommendations were made based on the results:

- 1. The school counsellor in collaboration with the administrative unit and government should provide standard classroom building and conducive environment for teaching and learning process.
- 2. Computer education and training should be made available and mandatory in the school system, right from the primary to tertiary level of education. ICT programme should be adequately implemented in all school.

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