Relationship between School Facilities and Academic Performance of Senior Secondary School Students in Ifo Local Government Area, Ogun State, Nigeria

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Abstract
The study examined the relationship between school facilities and students' academic performance of secondary school students in Ifo Local Government area, Ogun State, Nigeria. The main purpose of the study was to examine the relationship between school facilities and students' academic performance of secondary school students. Four hypotheses were postulated to guide the study; the study made use of the descriptive survey research design method. The sample comprised 125 participants and a self-designed questionnaire titled "School Facilities and Performance Test in Economics Inventory (SFPTEI)" was used to obtain the data that was used for the study. The data obtained was analysed to test the hypotheses using the inferential analysis of correlation, tested at 0.05 level of significance. The result revealed that there was a significant relationship between the use of classroom and academic performance while no significant relationship existed between other school facilities such as Library, Laboratory, and e-Learning facilities and academic performance. Based on the results of this study, it was recommended that school facilities should be properly utilized and maintained by the school management.

Keywords: Academic performance, School facilities, Secondary school students

Introduction

Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs and habits. Education is a mental activity by means of which skills, attitude, appreciation and ideas are acquired, resulting in modification of behaviour. Chandra (2018), posit that education is a powerful agent of change, which improves health, livelihoods, contributes to social stability and drives long-term economic growth of every nation. On this note, Inguran, Tabitha, and Terna (2019) described education as the veritable machinery for the development of any nation and the process for bringing positive change for the benefit of the society.

Radhika (2018) stated that education is one of the imperative aspects that not only inculcates the essential skills, abilities and knowledge among the individuals, but also leads to overall growth and progress of the individuals, community and nation as a whole. Education frequently takes place under the guidance of educators to enhance the learning and comprehension process of it learners or students which in turn result to a positive academic performance. The academic performance of a student may include observable and measurable behaviour of a student at any point in time during the course of learning (Liem, 2016). Narad and Abdullah (2016) opined that the academic performance of students determines the success or failure of any academic institution. According to them, academic performance is the knowledge gained which is assessed by marks by a teacher and/or educational goals set by students and teachers to be achieved over a specific period of time.

Students' academic performance can be regarded as the observable and measurable behaviour of a student in a particular situation (Lee & Stankov, 2016). In accessing the cause effect of the level of student academic performance, some variables of the school serve as those instruments that could tailor the level of student academic performance positively and negatively. Puyate(2016) pinpointed school facilities are the major factors that affect students' academic performance. The school facilities are the facilities available for instruction and it possesses a strong influence in teaching-learning process. Okwelle (2016) opined that there is need for adequate school facilities like classroom buildings with good sitting arrangements, availability of well-equipped school library and science laboratories with modern machines, tools and materials for practices as well as modern e-learning facilities to motivate students towards learning.

According to Fayose (2016), school facilities remain an important area that should be studied and well managed to enhance students' academic performance. **Ahmodu, Adaramaja, and Adeyemi (2018),** found that school facilities and students' academic performance have a high degree of relationship. Therefore, it is possible for the students' academic performance to depend on school facilities. The school facilities variables are numerous but those that will be considered in this study are classroom, school library, science laboratories and e-learning (ICT). Adequate attention is needed to be given to classroom space, because it enhances effective teaching and learning process. Adigeb, Anake and Undie (2017) described the classroom as 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. This is in line with Akomolafe and Adesua (2016) findings that classrooms with adequate space and good seating arrangements facilitate the use of different teaching methods that are aligned to 21st century skills.

The library as a school facility provision is the center of intellectual life of any educational institution. The school library is a place set aside within the school where books are stored, read and borrowed. Usen (2016) described library as an essential factor in teaching-learning process. Library forms one of the most important educational services. Brown (2017) found that students who gain better academic success (e.g. course grades, grade point average (GPA), retention) used libraries in some ways compared with

students who did not use the library and achieve less. Titilayo, Shem and Omawunmi (2018) concluded that the importance of school library has been considered and it is so glaring that it is the power house and backbone for academic achievement of students. Meanwhile, Onesto and Bernard (2018) indicated that students lack interest in learning science subjects because of insufficient laboratories in their schools. **Laboratory** as a facility that provides controlled conditions in which scientific or technological research, experiments, and measurement may be performed. Moreover, Megan (2018) and Leblond (2019) stated that Science laboratory equipment will allow students to interact directly with the data that is gathered. Students will be getting a first-hand learning experience by performing different experiments on their own. Seeing is believing-concept is applicable to the using laboratories in teaching of science subjects as student tends to understand and recall what they see than they hear. Hence laboratory has significant positive impact on the academic performance of secondary school students.

The effective usage of e-learning tools would equally help in improving student's study skills, provide students with some of the prerequisite skills for academic preparedness, help students to link academic subjects to examination demands and improve students' organizational skills (Adebayo & Balogun, 2019). E-learning tools encourage students' class participation, ensure that students learn independently which boost students' confidence and provide learning opportunities that enhance academic performance. Ikwuka, and Adigwe (2016) opined that students who were taught using Information and Communication Technology (ICT) instructional package performed better in Christian Religion Studies (CRS). It should be noted that most of the studies carried out on school facilities and academic performance did not include the use of e-learning facilities as one the variables of school facilities; also the few that included the use of e-learning facilities are foreign based. It is against this background that this study examined the relationship between school facilities and academic performance of senior secondary school students in Ifo Local Government Area of Ogun State, Nigeria.

Statement of the Problem

There has been a drastic decline in some of the essential services required in our country's education system. The academic performance of secondary school students in the following examinations; Joint Admissions and Matriculation Board (JAMB), West African Senior School Examination Council (WASSCE) and National Examinations Council (NECO) have been reported poor over a decade. The menace of student's low academic performance had eaten deep into the quality of students and eventual leaders produced into the Nigerian economy. Some of these infrastructures are non-existent in some schools and at times the existing ones are in a very bad state (Idiege, Nja &Ugwu, 2017). Little or no importance is associated with school facilities as vehicle to academic performance. Overcrowded classrooms, unequipped libraries and science laboratories in secondary schools have resulted into serious challenges in the teaching and learning processes which result into low academic performance of students. To parents, the condition of facilities in the schools is a major criterion for selecting school for their children. Due to lack of provision and maintenance of school facilities in the school, the academic performance of students continued to go down year after year. It should be noted that most of the studies carried out on school facilities and academic performance did not include the use of e-learning facilities as one the variables of school facilities; also the few that included the use of e-learning facilities are foreign based. It is against this background that this study examined the relationship between school facilities and academic performance of senior secondary school students in Ifo Local Government Area of Ogun State, Nigeria.

Four hypotheses were tested in the study at 0.05 level of significance:

$H0_1$: There is no significant relationship between provision of classrooms and academic performance of secondary school students.

$H0_2$: There is no significant relationship between availability of library and academic performance of secondary school students.

$H0_3$: There is no significant relationship between availability of science laboratories and academic performance of secondary school students.

$H0_4$: There is no significant relationship between availability of e-learning facilities and academic performance of secondary school students.

Methodology

The survey research design was adopted for this study. The target population for the study comprised all the public Senior Secondary II students in Ifo Local Government Area, Ogun State, Nigeria.

The sample size for this study comprised130respondents selected from public Senior Secondary II students in Ifo Local Government Area, Ogun state, Nigeria. According to the Ogun State Teaching Service (2021), there are twenty-two (22) public senior secondary schools in Ifo Local Government Area of Ogun State. Out of these schools, the research used the purposeful sampling technique to select 13 (thirteen) Senior Secondary Schools from public schools. Then, the simple random sampling technique was used to gather 10 students from each selected schools thereby making the total selected school students used for the study to be 130.

The research instrument used for the study was a self-designed questionnaire titled “School Facilities and Performance Test in Economics Inventory (SFPTEI)”

The questionnaire was divided into two sections. Section A comprised the demography data of respondents such as age, gender, class, etc, while section B comprised adapted 2nd term Economics questions set in 20 objectives form for the SSII classes. The face and content validity was ascertained and the test re-test was used to check the reliability, and the result was 0.73 coefficient. The instrument was administered by the researcher and two assistants.
The data collected were analysed and inferential analysis of correlation was used to test the hypotheses, tested at 0.5 level of significance. Also, the Statistical Package for Social Sciences (SPSS) 25.0 model was used to compute the data.

Results

Hypothesis One: There is no significant relationship between provision of classrooms and academic performance..

Table 1: Showing descriptive statistics and correlation matrix of Provision of Classrooms and Academic Performance

Variables	N	Mean	Std. Deviation	R	Sig.
Provision of Classrooms	130	14.25	2.773	-0.204*	0.022
Academic Performance	130	16.28	1.933		

*. Correlation is significant at the 0.05 level (2 -tailed).

The table 1 above shows an r – value (-0.204*) which is negative and low value. It follows then that there exists a low negative relationship between the two variables. The level of significant (0.022) which is less than .05, indicate that provision of classrooms has a significant relationship with academic performance of secondary school students.

Hypothesis Two: There is no significant relationship between availability of library on the academic performance of secondary school students.

Table 2: Showing Descriptive Statistics and Correlation matrix of Provision of School Library and Academic Performance.

Variables	N	Mean	Std. Deviation	R	Sig.
Provision of School Library	130	12.23	2.508		
Academic Performance	130	16.28	1.933	-0.072	0 .427

***.** Correlation is significant at the 0.05 level (2-tailed).

The table 2 above shows an r - value (-0.072) which is negative and low value. It follows then that there exists a low negative relationship between the two variables. The level of significant (0.427) which is greater than 0.05, indicate that Provision of School Library has no significant relationship with academic performance of secondary school students.

Hypothesis Three: There is no significant relationship between availability of science laboratories and academic performance of secondary school students.

Table 3: Showing Descriptive Statistics and Correlation matrix of Provision of School Laboratories and Academic Performance.

Variables	N	Mean	Std. Deviation	R	Sig.
Provision of School Laboratories	130	12.246	3.249	-0.086	0.338
Academic Performance	130	16.28	1.933		

*. Correlation is significant at the 0.05 level (2-tailed).

The table 3 above shows an r – value (-0.086) which is negative and low value. It follows then that there exists a low negative relationship between the two variables. The level of significant (0.338) which is greater than 0.05, indicate that provision of school laboratories has no significant relationship with academic performance of secondary school students.

Hypothesis Four: There is no significant relationship between availability of e-learning facilities and academic performance of secondary school students.

Table 4: Showing Descriptive Statistics and Correlation matrix of availability of e-learning facilities and Academic Performance.

Variables	N	Mean	Std. Deviation	R	Sig.
Availability of e-learning facilities	130	12.24	3.305		
Academic Performance	130	16.28	1.933	-0.117	0.195

*. Correlation is significant at the 0.05 level (2-tailed).

The table 4 above shows an r – value (-0.117) which is negative and low value. It follows then that there exists a low negative relationship between the two variables. The level of significant (0.195) which is greater than 0.05, indicate that there is no significant relationship between availability of e-learning facilities an academic perfor**mance** of secondary school students.

Discussion of Findings

Hypothesis one states that there is no significant influence of provision of classrooms on academic performance of secondary school students in Ifo Local Government. The result of the findings rejected this hypothesis. We therefore, uphold the alternate hypothesis which states that there was significant influence of provision of classrooms on academic performance of secondary school students in Ifo Local Government. The result agreed with the study by Adigeb, Anake and Undie (2017), Adesua (2016), Emenalor (2017), Asiabaka (2018), Lezotte and Passiroque (2016) and Etuk (2017) who were of the view that the classroom is an 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. The research work carried out above revealed that provisions of classrooms with adequate space and good seating arrangements facilitate the use of different teaching methods that are aligned to 21st century skills and have positive impact on academic performance.

Hypothesis two states that there is no significant relationship between availability of library on the academic performance of secondary school students. The result of the findings agreed with this hypothesis. This indicates that there is no significant relationship between availability of library on the academic performance of secondary school students. The result corroborated with the findings of Scoulas and Groote (2019) who found that the provision of school library and students' visit to library did not improve students' academic performance but the use of library resources such as journal article and database, positively associated with the student academic achievement. This result further agreed with Usen (2016) and Krista, Jan and Shane (2017) who found that the chief purpose of a school library is not just to provide the facility but to make available to teachers and students at their convenience. The results of this study showed that the provision of school library alone is not enough but it's important to put it to use regularly with well-equipped textbooks and other resources.

Hypothesis three states that there is no significant relationship between availability of science laboratories and academic performance of secondary school students. The result of the findings agreed with this hypothesis. This indicates that there is no significant relationship between availability of science laboratories and academic performance of secondary school students.

The result agreed with the findings of Samuel (2018) who stated in his study that even though the laboratory is available but the student performance was poor due to the student poor attitude to practical. Also, Rambabu (2017) and Musah and Bahladi (2017) further affirmed that in most schools where laboratories are available, they are not enough to cater for the high populations of students, and schools do not have laboratory for different subjects. This is negatively affecting the student academic performance. In addition, these findings are consistent with the findings of Danjuma and Adeleye (2016) that lack of effective utilization of laboratory apparatus and equipment was responsible for students' poor performance.

Hypothesis four states that there is no significant relationship between availability of e-learning facilities and academic performance of secondary school students. The result of this finding accepted the hypothesis. The results are in agreement with the work of different scholars' such asAlderete and Formichella (2016), Chiraz (2016) and Patricia (2018) who all claimed no significant relationship exist between ICT used and academic performance. The issue of no relationship that existed between the use of ICT and students' academic performance may depend on other factors, such as the misuse of the ICT facilities.

Conclusion

The results of the study provided both empirical and statistic evidences on the relationship between school facilities (classrooms, library, science laboratories, and e-learning) and students' academic performance in economics in selected senior secondary schools in Ifo Local Government Area, Ogun State, Nigeria. Despite the fact that the concepts of school facilities and students' academic performance have been widely studied in most developed countries by the academic and consultants, it continues to remain an emergent study in Africa especially Nigeria and the educational sector.

Recommendation

The study recommended that:

1. There should be proper utilization and maintenance of available school facilities by the school.
2. Students should be given unrestricted access to the school library with adequate supervision.
3. Classroom should be made conducive for learning with the provision of comfortable furniture, chalkboard, good ventilation and lightening and relevant instructional materials for teaching every subject.

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