

# The Impact of Physical Facilities on Students' Level of Motivation and Academic Performance in Senior Secondary Schools in South West Nigeria

Dr. Comfort Olufunke Akomolafe<sup>1\*</sup> Dr. Veronica Olubunmi Adesua<sup>2</sup>

1. Department of Educational Foundations and Management, Ekiti State University, Ado-Ekiti

2. Department of Curriculum Studies, School of Education, College of Education, Ikere-Ekiti

## Abstract

The paper examines the relevance of physical facilities in enhancing the level of motivation and the academic performance of senior secondary school students in South West Nigeria. The study adopted ex-post facto design. The population consists of all senior secondary students in South West Nigeria. The sample for the study include one thousand and fifty senior secondary school students from three states out of the six states in the South West Geo-political zone. The researcher made use of a questionnaire and an inventory to collect data. A self designed questionnaire tagged "Motivation and Academic Performance of Senior Secondary School Students" (MAPSSS) was used to elicit information from the respondent. The result showed that there was a significant relationship between physical facilities and students level of motivation and academic performance. Based on the findings of the study, more physical, human and material resources that are of high quality should be made available in public school to motivate students towards learning. More priority should be given to allocation of funds to make the public school conducive for teaching and learning to take place; this will improve the academic standard of public schools.

**Keywords:** Physical facilities, students' motivation, academic performance, senior secondary schools.

## INTRODUCTION

It appears that the physical facilities in the school setting go a long way to motivate students to learn. Physical facilities in any school system range from the school plant, that is the school buildings, classroom, library, laboratories, toilet facilities, learning materials to other infrastructures that would likely motivate students towards learning. Experience has shown that most of the physical facilities that are germane to effective learning/academic performance of students appears not to be sufficient in our public secondary schools today. Those available seem not to be of standard quality, some seem to lack maintenance culture, while some are in dilapidated conditions.

The status of physical facilities especially in our public secondary schools today appears to be of great concern to educators. It seems that the provision of these school facilities have dwindled over the years, perhaps due to increase in school enrolment rate which had led to population explosion in public schools. It has been observed that school physical facilities are essential tools to facilitate and stimulate learning programmes. Teachers need them in an ideal working environment. Experience shows that if physical facilities are available, students tend to have interest in learning; this will invariably lead to high performance.

A close observation of the performance of secondary school students perhaps could be traced to lack of physical facilities and a motivating learning environment. Most schools seems to lack the necessary facilities that could enhance effective teaching and learning as a result little is expected from students in terms of academic performance. Experience shows that inadequate physical facilities have some adverse effect on students' interest to learn. Hence, this may invariably affect their academic performance. In a situation where students are not having access to normal facilities like library equipment and inadequate seats in the classroom it is observed that these could contribute to low performance of students.

Apart from protecting student from sun, rain, heat and cold, there should be enough space, seats, laboratory and internet facilities and a host of other physical facilities that could enhance the level of motivation and academic performance of students. In "The Nation" Nigeria daily newspaper of October, 2009, students were reported to have demonstrated over the condition of infrastructures in public schools in Nigeria. It was therefore, believed that where facilities are adequately provided, there seems to be an increase in students performance.

## School Physical facilities

Physical facilities refers to the school plant, that is, the school buildings, classrooms, library, laboratories, toilet facilities, offices and other materials and infrastructures that would likely motivate students towards learning. Physical facilities are germane to effective learning and academic performance of students. In support of this, Hallak (1990), identified facilities as the main factor contributing to academic achievement in the school system. They include the school buildings, classroom, libraries, laboratories and recreational equipment among others.

Hallak claimed that the quality, appropriateness and adequacy of these items contribute to performance in the school system.

Adeyemi (2008), opined that performance is a measure of educational output. Academic performance can be viewed as the extent to which an individual learner acts or does a piece of work, how well or poor he/she does the job or the activities within a learning process. Poor performance, however can be regarded as having performed below the required academic performance. Charles (1994), referred to poor performance as performance that fall below the desired standard.

Recent studies have emphasized the importance of the availability of physical facilities. Summarizing Ajayi and Ayodele (2001), they emphasized that the availability of these resources are quite important to achieving effectiveness in instructional delivery and supervision in the school system. They further buttressed the fact that non-availability of basic facilities such as classrooms, office accommodation, workshops, sporting facilities, laboratories, library et cetera which is being experienced in secondary schools is a perfect reflection of what obtains in the university system.

Ogunniyi (1982), claimed that laboratories play a key role in the teaching and learning of science that is why Adedeji (1998), noted that these facilities have to be adequate and should be in good condition for schools to function properly.

In support of the above Okunola (1985), said that well sited school buildings with aesthetic conditions, laboratory and playground often contribute to improved performance in the school system. He also argued that the availability of school building and other plant facilities are very important as they could enhance effective teaching and learning. Altbach (1998), is of the view that adequate facilities are essential for academic work. Also, in support of this Chandan (1999), claimed that for effective teaching to take place in any educational setting there must be provision of adequate and quality physical facilities.

Adewunmi (2000), corroborated Chandan's (1999) view, he revealed that the availability of adequate number of physical facilities had significant influence on pupil's academic performance. He further emphasized that adequate number of physical facilities should be supplied to state primary schools. Ademilua (2000), in his study observed that inadequate provision of school resources has been a major factor of poor students academic performance in Ekiti State. He equally remarked that without adequate physical resources/facilities there would be a continuous decline in students academic performance.

In support of this view, Ajayi (2000), emphasized on the need for the availability of physical materials in the school system in other to boost teachers' job performance. This would, invariably, enhance academic performance of students. In a related study carried out by Mba (1994), he revealed that adequate provision and maintenance of school plant is a remedy (solution) for any academic encumbrance. This means that running the school system without adequate provision and maintenance of school plant can be very cumbersome for teachers. In support of this, Nwankwo (1982), also maintained that the provision and maintenance of physical facilities such as building, laboratories, libraries, furniture, equipment, *et cetera* are very important for effective and efficient school administration and better academic performance (on the part of students).

Also, in recent studies carried out by Okunamiri (2003), on the provision and utilization of school facilities in some selected secondary schools in Nigeria, his findings revealed that although facilities were adequately provided in some schools, they were not effectively utilized. He further emphasized on the need to ensure effective and efficient realization of the goals and objectives of the of the educational system. This implies that the availability of physical facilities alone does not enhance learning; rather it is the adequate utilization of these facilities that can only motivate students to learn and enhance their academic performance.

A review of previous studies conducted by Omotoso (1991), on the availability of physical facilities and equipment in African countries is disheartening. His studies reveal that most secondary schools' building in Ondo State were old and in a dilapidating condition. Many of the classrooms, laboratories, examination halls, libraries and office furniture were in a terrible state of disrepair and this has contributed to poor academic performance. Most windows were out of use, thereby causing hazards to life while fluorescent tubes for providing electricity were out of place.

## **STATEMENT OF THE PROBLEM**

The state of physical facilities in public secondary schools today appears to be of great concern to students parents and all educators. These seems to be inadequate provision of this facilities, some of the existing ones seems to be in a dilapidated state, while some seems lack good maintenance or may not function at all. Moreover, there seems to be an increase in population of students due to high enrolment rate. A close observation of student's performance seems to indicate lack of inadequate physical facilities and an enabling learning environment that could motivate, secondary students towards high performance. It seems that where these facilities are lacking, students develop non-challant attitudes toward learning. These problems and concerns necessitated investigating into the relevance of physical facilities on students' level of motivation and academic performance.

## RESEARCH QUESTIONS

1. What is the level of students motivation derived from physical facilities?
2. What is the level of academic performance of students in core subjects?

## RESEARCH HYPOTHESIS

There is no significant relationship between physical facilities and the academic performance of senior secondary school students.

## RESEARCH DESIGN

The research design for this study is *ex post facto*. An *ex-post facto* design was considered appropriate because, it examines the cause and effect relationship between one variable and the other, it describes the relationship that exist between classroom environment and academic performance of students. It involves the use of inventory, that is the collection of existing data (i.e. the 2012 WAEC Results of SSS 3 students). It involves the study of a large population, using unbiased sample through the use of questionnaire, to elicit information from respondent, on the impact of classroom environment on academic performance.

### Subjects

The subject comprised one thousand and fifty (1,150) senior secondary school three students (i.e. S.S.3) from three states out of the six states in the South West Geo-political zone. The sampled states are Osun, Ondo and Ekiti.

## RESEARCH INSTRUMENT

The researcher made use of a questionnaire and inventory to collect data. A self designed questionnaire tagged "Motivation and Academic Performance of Senior Secondary School Students" (MAPSSS) was used to elicit information from the respondents on motivating factors that could enhance their academic performance. This consists of two parts. Parts A consists of the bio-data of the respondents (students), while Part B consist of 9 sections. Sections A – I and Section C of the questionnaire on classroom environment was made use of to measure the impact of classroom environment on the academic performance of senior secondary school students.

## VALIDATION OF INSTRUMENT

The instrument was validated with the help of experts in Tests and Measurements, Curriculum Studies and Educational Management. The reliability of the instrument was determined using test-re-test methods. It gave a coefficient of 0.85 which was considered high enough.

### Data Analysis

In analyzing the data collected for the study, Pearson Product Moment Correlation method was used to test the hypothesis, this was tested at 0.05 level of significance.

**Question 1:** What is the level of students motivation derived from physical facilities.

Table 1. Descriptive Analysis showing the level of students Motivation derived from school physical facilities.

	Low		Moderate		High	
	N	%	N	%	N	%
Physical facilities	324	28.2	469	40.8	357	31.0

Table 1 shows that 324 (28.2) had low perception of their level of motivation derived from school physical facilities, 469 (40.8) had moderate perception on the level of motivation derived from the school physical facilities, while 357 (31.0%) had high perception on the level of motivation derived from the school physical facilities.

**Question 2:** What is the level of academic performance of students in core subjects?

Table 2. Descriptive Analysis showing the level of Academic Performance of students on core subjects.

In determining the level of motivation derived from the respondents on the relevance of school physical facilities on the academic performance

of students, the result of students in 2012 West African Examination Council for the selected schools in the sampled states were obtain in coresubject areas as depicted in Table 2.

students at 0.05 level of significance. The result is presented in Table 3.

Table 3: Pearson Product Moment Correlation, Summary of The school physical facilities on the Academic Performance of Students.

Core Subjects	No Registered	A <sub>1</sub> – B <sub>3</sub>		C <sub>4</sub> – C <sub>6</sub>		D <sub>7</sub> – E <sub>8</sub>		F <sub>9</sub>		Total	
		N	%	N	%	N	%	N	%	N	%
Mathematics	2855	662	23.2	1299	45.5	529	18.5	365	12.8	2855	100.0
Biology	2906	521	17.9	1377	47.4	623	21.4	385	13.2	2906	100.0
Yoruba	2872	856	17.6	1301	45.3	633	22.0	433	15.1	2872	100.0
Economics	2848	1006	25.7	1016	53.3	345	12.1	253	8.9	2848	100.0
English	2868	385	13.4	1377	48.0	725	25.3	381	13.3	2868	100.0

Key

- A<sub>1</sub> – B<sub>3</sub> High level
- C<sub>4</sub> – C<sub>6</sub> Moderate level
- D<sub>7</sub> – E<sub>8</sub> Low level
- F<sub>9</sub> Failed

The result shows that the level of academic performance of students in core subject during the period under review was high. Hypothesis

There was no significant relationship between school physical facilities and the academic performance of senior secondary school students.

Scores on school physical facilities were correlated with the weighted scores on the academic performance of senior secondary school

Variable	N	r cal	r table
The classroom environment	23	0.655*	0.381
Academic Performance of Senior Secondary School Students			

\*P<0.05 (significant result)

Table 3 showed that r- cal (0.655) was greater than r-tab (0.381) at 0.05 level of significance. The null hypothesis was hence rejected. Therefore,, there is significant relationship between school physical facilities and the academic performance of senior secondary school students. Hence, the school physical facilities environment had positive impact on the academic performance of senior secondary school students.

The findings suggests that the availability and effective utilization of school physical facilities play a significant role in enhancing students academic performance, while inadequacy of such physical facilities could contribute to poor academic performance in students. Therefore, if physical facilities are available and judiciously utilized to meet the needs of the students, this could invariably facilitates students' interest in learning and lead to high performance. The findings supports that of Hallak (1990), Ogunniyi (1982), Okunola (1985), Altbach (1998), Okeke (1990), Ajayi and Yusuf (2005). This finding contradicted Szents (1976) that physical facilities had no significant relationship with students learning outcomes and academic performance. If the physical facilities are available, adequate and effectively utilized it could captivate and sustain students' interest to learn and invariably contribute to high level of academic performance of students in public secondary schools.

**Recommendations**

Based on the findings of this study, it was recommended that Government, who is the proprietor of public secondary schools in Nigeria should make available more physical, human and material resources that are of high quality to students in public schools to motivate students towards learning. More priority should be given to allocating of funds to public schools to make them a better place for conducive teaching and learning to take place. This will improve the school/learning environment and the academic standard of public schools.

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