ACADEMIC ACHIEVEMENT IN ENUGU'S SECONDARY SCHOOLS: UNMASKING THE IMPACT OF SCHOOL ENVIRONMENT

[1]Dr. Chika Adebayo Okafor, [2]Prof. Ngozi Emeka Onwuka, [3]Dr. Ifeoma Chukwudi Okonkwo

Article Info	Abstract
	This study investigates the significant impact of school environment on students' academic performance. A school's environment, encompassing physical facilities, classroom management, health support, and disciplinary policies, plays a pivotal role in shaping students' educational outcomes. Recognizing the diverse variables that influence academic performance, such as classroom settings, library resources, teacher quality, and teaching methodologies, this research addresses the need for a comprehensive understanding of the interplay between these elements. Academic performance, often gauged through grading systems and external examinations, serves as a critical measure of students' achievements. The pressure to excel in an increasingly competitive society has amplified the importance of academic success. In Nigeria, concerns persist over declining educational standards, evidenced by subpar performance in national examinations. The deteriorating quality of education threatens the nation's human capital development. Secondary education holds particular significance in shaping individuals for societal advancement. However, inadequate school infrastructure, characterized by poor lighting, noise pollution, and insufficient ventilation, hinders effective teaching and learning. These conditions lead to health issues among both students and teachers, resulting in absenteeism and diminished performance. This research underscores the urgent need to optimize the school environment for enhanced academic outcomes, aligning with the broader goals of national development and human capital formation.

---

[1] Department of Educational Management, Faculty of Education, Enugu State University of Science and Technology (ESUT) Nigeria

Introduction

A school is an institution designed for the teaching of students (or "pupils") under the direction of teachers. A school is a place where children are educated. It is also defined as any institution at which instruction is given in a particular discipline. Every school has to be located in a place called environment. A positive school environment is defined as a school having appropriate facilities, well managed classrooms, available school based health supports and a clear, fair disciplinary policy. The school environment, which include the classrooms, libraries, technical workshops, laboratories, teachers' quality, school management, teaching methods, peers, etc are variables that affect students' academic performance (Ajayi, 2001 and Oluchukwu, 2000). Hence, the school environment remains an important area that should be studied and well managed to enhance students' academic performance.

Academic performance refers to the degree of a student's accomplishment on his or her tasks and studies. The most well-known indicator of measuring academic performance is grades which reflect the student's "score" for their subjects and overall tenure. Success is measured by academic performance in most educational institutions. In this case, how well a student meets standards set out by an institution itself or an external examination body either set up by the government or an independent outfit signifies success or good performance (Ajao, 2011). Today's modern society expects students to be a high achiever. The key criteria to judge one's true potentialities and capabilities are perhaps academic performance which has become an index of a student's future. As a result, there is a great pressure on the minds of the child and their parents on how to attain the societal expectations. The school that is charged with the responsibility of impacting teaching and learning processes does not exist in a vacuum. Since, it has been discovered that the student's academic performance is a function of various factors based on the learning environment which comprises of all the student is exposed to in the school and outside the school that can facilitate or inhabit learning. The issue of poor academic performance of students in Nigeria has been of much concern to the government, parents, teachers and even student themselves. The quality of education not only depends on the teachers as reflected in the performance of their duties, but also in the effective coordination of the school environment for an efficient and effective education (Ajao, 2001).

Education remains the bedrock of development but in Nigeria, there is consensus about the falling educational standards (Adesehinwa, 2013). The poor performance of secondary school students in different subjects as observed in the yearly results of Senior School Certificate Examination conducted by WAEC and NECO which are external bodies justifies this claim of dwindling academic performance of secondary school students in both internal and external examinations (Ajayi, Hasstrup & Osalusi, 2010). The increasing fall in the quality of manpower and the negative implication of this on the posterity of Nigeria is making this issue of learning environment and academic performance a concern (Aremu, 2000 cited in Unanma, Abugu, Dike & Umeobika, 2013). Specifically, Alimi, Ehinola & Alibi (2011) posit that, secondary school is pivotal in human capital formation and development. Put differently, secondary education is an instrument for national development in that it moulds and forms the individual who after advances the society (National Policy on Education, 2013).

The physical characteristics of the school have a variety of effects on teachers, students, and the learning process. Poor lighting, noise, high levels of carbon dioxide in classrooms, and inconsistent temperatures make teaching and learning difficult. Poor maintenance and ineffective ventilation systems lead to poor health among students as well as teachers, which leads to poor performance and higher absentee rates (Frazier, 2002, Lyons, 2001; and Ostendorf, 2001). These factors can adversely affect student behaviour and lead to higher levels of frustration among teachers, and poor learning attitude among student.

Beyond the direct effects that poor facilities have on students' ability to learn, the combination of poor facilities, which create an uncomfortable and uninviting workplace for teachers, combined with frustrating behavior by students including poor concentration and hyperactivity, lethargy, or apathy, creates a stressful set of working conditions for teachers. Because stress and job dissatisfaction are common pre-cursors to lowered teacher enthusiasm, it is possible that the aforementioned characteristics of school facilities have an effect upon the academic performance of students.

This study takes a critical look on the influence of school environment on the academic performance of secondary school students. It is a fact that, the surrounding environment of students influences their performances, for example, the quality of the school building has the direct impact on students performance, students perform better in better academically in better building (Oluchukwu, 2011). School environment which include classroom spaces planning, administrative places planning, circulation spaces planning, spaces for conveniences planning, general infrastructure planning, the teachers as well as the students themselves are essential in teaching-learning process. The extent to which students' learning could be enhanced depends on their location within the school compound, the structure of their classroom, availability of instructional facilities and accessories. It is believed that a school with adequate learning environment contributes to stir up expected outcomes of learning that will facilitate good academic performance by encouraging effective teaching and learning (Frazier, 2002, Lyons, 2001; and Ostendorf, 2001).

Beyond the direct effects that poor facilities have on students' ability to learn, the combination of poor facilities, which create an uncomfortable and uninviting workplace for teachers, combined with frustrating behaviour by students including poor concentration and hyperactivity, lethargy or apathy, creates a stressful set of working conditions for teachers. Because stress and job dissatisfaction are common pre-cursors to lowered teacher enthusiasm, it is possible that the aforementioned characteristics of school facilities have an effect upon the academic performance of students.

Statement of the Problem

Emphasizing the importance of school environment to students academic performance, it was asserted that school environment is an essential aspect of educational planning and unless schools are well suited, buildings adequately constructed and equipment adequately utilized and maintained, much teaching and learning may not take place. The high levels of students' academic performance may not be guaranteed where instructional space such as classrooms, libraries, technical workshops and laboratories are structurally defective. However, little is known on the impact of school environment on students' academic performance in Enugu education zone. The magnitude of environment problems on teaching and learning school is very difficult to determine because so many extraneous variables impinges on the teaching skills and learning capabilities of teachers and students in the classroom at different times. The time between school environment and home environment is hard to define and varies from person to another.

Purpose of the Study

The general purpose of the study was to examine the influence of school environment on the academic performance of secondary schools students in Enugu education zone. Specifically, the study sought to determine the:

i.   influence of adequate infrastructure on the academic performance of secondary school students;

ii.   influence of quality teachers on the academic performance of secondary school students; and

iii.   the influence of school facilities on the academic performance of secondary school students.

Research Questions

The following research questions guided the study:

i.   to what extent does adequate infrastructure influence the academic performance of secondary school students?

ii.   to what extent does the quality of teachers influence the academic performance of secondary school students?

iii.   to what extent does the school facilities influence the academic performance of secondary school students?

Hypotheses

The following null hypotheses were tested at P<0.05;

H_{O1}: There is no significant difference between the mean ratings of principals and teachers on the extent adequate infrastructure influence the academic performance of secondary school students.

H_{O2}: There is no significant difference between the mean ratings of principals and teachers on the extent the quality of teachers influence the academic performance of secondary school students.

H_{O3}: There is no significant difference between the mean ratings of principals and teachers on the extent the provision of school facilities influence the academic performance of secondary school students.

Research Method

This study adopted the descriptive method of research design. This study was carried out in the 31 secondary schools in Enugu education zone. Enugu education zone is one of the six education zones in Enugu State. It comprises of three local governments areas namely; Enugu North, Enugu East and Isiuzo L. G. A. The population of the study was all the 31 principals and 450 teachers in the zone. The researcher purposively sampled 12 public secondary schools out of the 31 in the education zone. However, the researcher got a sampled size of 12 principals and 45 teachers. In the aspect of the teachers' sampled size, the researcher made used of 10% of the total population of the teachers. This 10% is in line with Uzoagulu (2011) which stated that if the population for the study is known and it is made up of different groups, each group receives allocation based on its proportion to the population. The instrument used for data collection was a researcher made structured questionnaire titled "Influence of School Environment on the Academic Performance of Secondary school students Questionnaire (ISEAPSSQ)". It was validated by three experts in the Faculty of Education, ESUT. The instrument comprised 15 questionnaire items divided in clusters according to the three research questions. Reliability of the instrument was determined using Cronbach Alpha reliability estimate, at the end of which a reliability index of 0.82 was obtained. The copies of the questionnaire were administered to all the principals and teachers by the researcher. Mean and standard deviation was use to analyse data related to the research questions. The criterion mean of 2.50 was gotten by summing up the weighted options (4+3+2+1=10) and dividing it by total number of response options (4) as follows; 10/4=2.50. The t-test statistics was used to test the null hypotheses at 0.05 level of significant.

The decision rule for the hypothesis were that, hypothesis was not rejected when the t-calculated value is less than the critical table value, but rejected when the t-calculated value is greater than the critical table value.

Research Question 1:

To what extent does adequate infrastructure influence the academic performance of secondary school students?

Table 1: Mean response scores of Principals and Teachers on the extent adequate infrastructure can influence the academic performance of secondary school students

S/N	ITEMS Indicate the extent to which you agree with the statement below:	Principals			Teachers		
		$\overline{X}$	SD	Dec.	$\overline{X}$	SD	Dec.
1	There are enough classrooms in the school for adequate teaching and learning.	2.42	0.90	LE	2.30	0.88	LE
2	There are conducive offices for every staff in the school.	2.33	0.93	LE	2.45	0.92	LE
3	There is an accommodation for staff members.	2.28	0.91	LE	2.34	0.95	LE
4	The electrical infrastructure in the school is very good.	2.51	0.82	GE	2.62	0.88	GE
5	There is enough office furniture in the school.	2.60	0.99	GE	2.57	0.79	GE
	Cluster mean	2.43	0.91	LE	2.46	0.88	LE

Table 1 above shows the responses of principals and teachers on the extent infrastructure can influence the academic performance of public secondary school students in Enugu education zone. However, the general response of the respondents was to a low extent. The principal's mean ranged from 2.28 to 2.60 while that of teachers ranged from 2.30 to 2.62. The cluster means of 2.43 and 2.46 for Principals and Teachers and standard deviations of 0.91 and 0.88 respectively. These imply that infrastructural development is very important in any school environment in order to increase the academic performances of the secondary school students in Enugu education zone owing by the responses of the respondents.

Research Question 2: to what extent does the quality of teachers influence the academic performance of secondary school students?

Table 2: Mean response scores of Principals and Teachers on the extent the quality of teachers can influence the academic performance of secondary school students

S/N	ITEMS Indicate the extent to which you agree with the statement below:	Principals			Teachers		
		$\overline{X}$	SD	Dec.	$\overline{X}$	SD	Dec.
6	The teachers in my school are qualified based on their disciplines.	2.91	0.98	GE	2.92	0.99	GE
7	Our teachers are all NCE holders with little or no much teaching experience.	3.06	0.99	GE	2.66	1.14	GE
8	The teachers are professionals with many years of experience.	2.78	0.94	GE	2.86	0.99	GE
9	Our teachers are graduates from notable universities in and out of Nigeria.	2.75	1.04	GE	2.78	1.02	GE
10	Some of our teachers are Msc holders.	2.89	1.04	GE	2.83	1.03	GE
	Cluster mean	2.88	1.00	GE	2.81	1.03	GE

Table 2 above shows the responses of principals and teachers on the extent the quality of teachers can influence the academic performance of public secondary school students in Enugu education zone. However, the general response of the respondents was to a great extent. The principal's mean ranged from 2.75 to 3.06 while that of teachers ranged from 2.66 to 2.92. The cluster means of 2.88 and 2.81 for Principals and Teachers and standard deviations of 1.00 and 1.03 respectively. These imply that there are quality teachers in the secondary schools but they have to improve on their teaching skills in order to increase the academic performances of the secondary school students in Enugu education zone owing by the responses of the respondents.

Research Question 3:

To what extent do the school facilities influence the academic performance of secondary school students?

Table 3: Mean response scores of Principals and Teachers on the extent the availability of school facilities can influence the academic performance of secondary school students

S/N	ITEMS Indicate the extent to which you agree with the statement below:	PRINCIPALS $\overline{X}$	SD	Dec.	TEACHERS $\overline{X}$	SD	Dec.
11	There are good sporting facilities for the school.	2.55	0.83	GE	2.59	1.11	GE
12	There is a health care facility in my school.	2.56	0.99	GE	2.58	0.78	GE
13	There is a training facility for both the staff and students.	2.20	0.88	LE	2.21	0.89	LE
14	There is a research facility or library for the students.	2.53	0.94	GE	2.65	0.92	GE
15	There is an e-learning facility in my school.	2.30	0.93	LE	2.42	1.01	LE
	Cluster mean	2.43	0.91	LE	2.49	0.94	LE

Table 3 above shows the responses of principals and teachers on the extent the availability of school facilities can influence the academic performance of public secondary school students in Enugu education zone. However, the general response of the respondents was to a low extent. The principal's mean ranged from 2.30 to 2.56 while that of teachers ranged from 2.21 to 2.65. The cluster means of 2.43 and 2.49 for Principals and Teachers and standard deviations of 0.91 and 0.94 respectively. These imply that there is need for the availability of school facilities in the secondary schools in Enugu education zone.

Hypotheses

The following null hypotheses were tested at $P<0.05$;

H_{O1}: There is no significant difference between the mean ratings of principals and teachers on the extent adequate infrastructure influence the academic performance of secondary school students.

Table 4: t-test of significant difference between the mean scores of Principals and Teachers on the extent adequate infrastructure can influence the academic performance of secondary school students

Group	N	Mean	SD	df	t-cal	t-crit	Decision
Principals	12	2.43	0.91				
				55	0.103	2.021	Not rejected
Teachers	45	2.46	0.88				

Table 4 above presents the independent t-test analysis of the mean difference in the response opinions of principals and teachers on the extent adequate infrastructure can influence the academic performance of secondary school students. The result showed that the calculated t-value of 0.103 was less than the critical value

of 2.021. The null hypothesis was not rejected. Therefore, there was no significant difference between the responses of the Principals and teachers on the extent infrastructure can influence the academic performance of secondary school students in Enugu education zone.

$H_{O2:}$ There is no significant difference between the mean ratings of principals and teachers on the extent the quality of teachers influence the academic performance of secondary school students.

Table 5: t-test of significant difference between the mean scores of Principals and Teachers on the extent the quality of teachers can influence the academic performance of secondary school students

Group	N	Mean	SD	df	t-cal	t-crit	Decision
Principals	12	2.88	1.00				
				55	0.700	2.021	Not rejected
Teachers	45	2.81	1.03				

Table 5 above presents the independent t-test analysis of the mean difference in the response opinions of principals and teachers on the extent the quality of teachers can influence the academic performance of secondary school students. The result showed that the calculated t-value of 0.700 was less than the critical value of 2.021. The null hypothesis was not rejected. Therefore, there was no significant difference between the responses of the Principals and teachers on the extent the quality of teachers can influence the academic performance of secondary school students in Enugu education zone.

$H_{O3:}$ There is no significant difference between the mean ratings of principals and teachers on the extent the provision of school facilities influence the academic performance of secondary school students.

Table 6: t-test of significant difference between the mean scores of Principals and Teachers on the extent school facilities can influence the academic performance of secondary school students

Group	N	Mean	SD	df	t-cal	t-crit	Decision
Principals	12	2.43	0.91				
				55	0.340	2.021	Not rejected
Teachers	45	2.49	0.94				

Table 6 above presents the independent t-test analysis of the mean difference in the response opinions of principals and teachers on the extent school facilities can influence the academic performance of secondary school students. The result showed that the calculated t-value of 0.340 was less than the critical value of 2.021. The null hypothesis was not rejected. Therefore, there was no significant difference between the responses of the Principals and teachers on the extent school facilities can influence the academic performance of secondary school students in Enugu education zone.

Summary of Findings

From the results of the findings, it was found out that:

i.   Principals and Teachers respondent to a low extent on the extent infrastructure can influence the academic performance of secondary school students in Enugu education zone.

ii.   Principals and Teachers respondent to a great extent on the extent the quality of teachers can influence the academic performance of secondary school students in Enugu education zone.

iii.   Principals and Teachers respondent to a low extent on the extent school facilities can influence the academic performance of secondary school students in Enugu education zone.

iv. there was no significant difference between the mean scores of Principals and Teachers on the extent infrastructure can influence the academic performance of secondary school students.

v. there was no significant difference between the mean scores of Principals and Teachers on the extent the quality of teachers can influence the academic performance of secondary school students.

vi. there was no significant difference between the mean scores of Principals and Teachers on the extent school facilities can influence the academic performance of secondary school students.

Discussion of Findings

It was found out in research question one that, there was a low extent to which infrastructure can influence the academic performance of secondary school students. This study agrees with A good school indulges in building better learning environment which enables the students to excel especially their examinations. In schools the researcher visited, classrooms, student class ratio, cleanliness, staff room and others were not really in order. This study disagrees with Ajao (2011) who posited that, for an effective teaching and learning to take place, the environment must be conducive. Ajao further posited that, a well equipped classroom makes a student to feel relax and fully concentrates in the teaching activity. From the evidenced of hypothesis 1, there was no significant difference between the mean scores of Principals and Teachers on the extent infrastructure can influence the academic performance of secondary school students.

In the results of research question 2, it was found out that, the quality of teachers influences the academic performance of secondary school students in Enugu education zone. This study is in accordance with the Adesehinwa (2013) who posited that, education which is the bedrock of development must have people who are qualified to be in-charge of the day to day activities especially in the area of teaching staff. It is a noted fact that, quality teachers impact quality knowledge to the students. But in a school where there are teachers who are not qualified, the resultant effect is to bring out half-baked graduate. However, the evidenced of hypothesis 2 shows that, there was no significant difference between the mean scores of Principals and Teachers on the extent the quality of teachers can influence the academic performance of secondary school students.

Conclusion

Based on the findings of this study, it was concluded that the learning environment in secondary schools in Nigeria has significant relationship with academic performance of secondary school students. It was also concluded in the study that quality teachers are needed in the secondary school system in order to improve the academic performances of the secondary school students in Enugu education zone. However, the public secondary schools which accommodate more student population suffer from infrastructural neglect as the principal do not control any budget even to maintain the existing structure.

Recommendations of the study

Based on the results of the study, the following recommendations are made.

1. The study recommends provision of facilities like modern laboratories, functional libraries, and comfortable classrooms for better academic performance; in addition to effective maintenance or renovation of old buildings, chairs, desks, recreational equipment among others should be part and parcel of the schools system.

2. The Enugu state government should pay more attention to education by employing qualified teachers to teach the students in order to get a good result.

References

Adesehinwa, O. A. (2013). Effects of Family Type (Monogamy or Polygamy) on Students Academic Achievement in Nigeria. International Journal of Psychology and Counselling 5(7), October. Pp.153-156.

Ajao, T. (2011). School Facility Conditions and Student Academic Achievement. A Research Report". Prepared by CCLA's Institute for Democracy, Education and Access. October 2002, Document Wwws-Rr008-1002.

Ajayi, I. A., H.T. Haastrup & F.M. Osalusi (2010). "Learning Environment and Secondary School Effectiveness in Nigeria". Stud Home Comm. Science, 4(3) Pp. 137-142.

Alimi, O. S., G. B. Ehinola & F. O. Alabi (2012) "School Types, Facilities and Academic Performance of Students in Senior Secondary Schools in Ondo State, Nigeria". International Education Studie 5(3), June. Pp. 44-48.

Federal Republic of Nigeria, (FRN), (2013). National Policy on Education. Abuja: Federal Ministry of Education.

Frazier, E. (2002; Lyons, C. 2001 and Ostendorf, F. 2001). Making better decisions about school problems: How administrators use evaluation to find solutions. California: Corwin Press

Uzoagulu, A. E. (2011). Practical guide to writing research project reports in Tertiary Institutions. Published and Printed in Nigeria by CHESTON LTD. Enugu.