

Effects of Poor Infrastructures on Students' Academic Performance in Some Selected Secondary Schools in Akwanga Local Government Area, Nasarawa State

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Abstract

Nigeria, having recognized the effectiveness of education as a powerful instrument for national progress and development, adjusted its secondary school educational system to encompass diversified Infrastructure that improves the academic performance of secondary School Students. However, the educational system does not seem to achieve its purpose, as the majority of secondary school leavers are not equipped with the necessary skills to empower themselves. Consequently, they cannot raise their socio-economic standard and therefore cannot contribute to nation-building; hence, the need for this study. The broad aim of the study was to Examine the importance of infrastructure on the student's academic performance, Examine the impact of poor infrastructure on the student's academic performance, As certain the factors that hinders the student's academic performance, And Examine the extent the Government effort to provide or put in place the school Infrastructure which affect Academic Performances of the secondary school students with a view to identifying the root cause of the problem. Following the objectives, five research questions were formulated. Adopting the descriptive survey research design. The research work adopted cognitive theory in relation to the Academic Performances of Students. The research work was conducted in Akwanga L.G.A., Nasarawa. Two thousand seven hundred and fifty-nine Students were selected for the research. In choosing the student-subjects, a random sampling technique is used, adopting the Sample Size Determination Using Krejci and Morgan Table. Data collected were subjected to

appropriate quantitative and qualitative analyses using Descriptive statistics were used to summarize data collected using a questionnaire, which was analyzed using the mean method for each item of the questionnaire for easy interpretation of findings. The findings show that infrastructure plays a crucial role in students' academic performance in secondary schools. Poor infrastructure negatively impacts productivity, learner interest, and overall academic outcomes. Adequate availability of facilities, textbooks, classrooms, and instructional materials contributes to effective teaching and learning.

Keywords:Poor Infrastructures;
Academic Performances; Secondary Schools;
educational authorities.

Introduction

Students' low performance in secondary schools has been greatly influenced by the declining quality of education, which has been the talk of the town, particularly since the end of the Nigerian civil war. The majority of people have not taken the time to consider the reasons for the subpar performance. Some blame the homes' moral laxity, while others blame state schools. The school's primary purpose as an educational establishment is to provide instruction and learning opportunities. Educational objectives, diverse staff, curriculum, knowledge, physical facilities, materials, students, finances, and so on are all inputs into the school system to generate well-equipped outputs within the framework of the education production function. The three elements of human resources, funds, and supplies must be provided and handled in

harmony for the school to be effective and efficient in carrying out its duties (NERDC, 2012). According to Coombs (1968), quoted by Osahon (2001), "any productive system, whatever its aim and technology, requires management."

Leadership and guidance, oversight and coordination, ongoing assessment and modification are all necessary. In the past, the material part of school administration was neglected in favor of the elements of personnel and money. However, efforts have recently shifted to the material component since without school infrastructure, effective and beneficial teaching and learning cannot occur. The tangible materials that support efficient teaching and learning in schools are known as school facilities. According to Castalsi (1971), these are those educational resources that allow a proficient teacher to accomplish a degree of instructional effectiveness that is significantly higher than what is achievable in the absence of them.

Osahon (2001), referenced in Ogbodo (1996), defines educational facilities as those tangible items that support the teaching and learning activities in the classroom. A sharp rise in student enrollment and a decline in municipal financing for education are two factors contributing to Nigerian schools' inadequate infrastructure and equipment. Students' academic achievement and educational efficiency are naturally positively correlated with educational infrastructure amenities (Osahon, 1994). Funds and infrastructure are needed for the numerous school program activities as well as extracurricular activities in order to achieve the educational objectives of the school and the school system.

According to Obasi (2005), there has been a significant decline in the quality of most of these infrastructures as the number of students has increased relative to the facilities available, which has an impact on students' academic performance. School facilities are tangible resources that improve teaching and learning, giving the process meaning and purpose. This is one of the many aspects that affect the quality of education provided by teachers and the academic success of students in any school. Those involved in the student's education must

create a definitive physical, social, and intellectual environment that supports the teaching and learning process in order to equip the students with appropriate and sufficient knowledge.

The availability of resources has been linked to the success of teaching and learning, and educational authorities must use these resources to raise student levels and competencies so that students are prepared for National Assessments in order to support underperforming schools. 89Amadi (2016). The creation of educational materials and the distribution of resources can accomplish this. A wide range of materials are available to assist teachers in meeting the needs and stimulating the interest of their students, including textbooks, library books, and websites. Owobi and Gal (2012) pointed out that material resources (books, charts, Computers, projectors, chemicals, etc.) and Physical facilities (libraries and laboratories) are the heart of the schools. The instructional materials could be written, audio, or audio-visual. The chalkboard, books, journals, wall sheets, charts, maps, atlases, and globes, as well as media like specimens, both preserved and living facts, models, and puzzles, are some of the other educational resources. By making teaching and learning simpler, these materials improved students' academic performance (Sa'ad, 2015). Students' learning outcomes are positively correlated with textbook availability. Academic underachievement resulted from the failure to use these resources, which caused kids with high primary school grades to regress in their secondary school academic performance.

A financial difficulty is a state in which stress is being caused by financial concerns. However, financial difficulties have recently become a significant issue for secondary school pupils. Students who struggle financially are said to have insufficient funds for their everyday needs and to be stressed out by money issues. Following that, both physical and mental health will be impacted by financial issues.

Halliday Wynes (2014) asserts that a student's socioeconomic situation influences their dedication to learning, which in turn influences their academic achievement. Furthermore, the majority of nations are experiencing recessions as a result of inflation and trade disputes, which

might negatively impact students' academic performance if they don't take the time to handle it.

The achievement of global educational aims and objectives is greatly dependent on educational resources. The availability and use of educational resources have a direct bearing on how well an educational institution achieves its goals (Ekundayo and Alonge, 2012). Over the years, the government and other educational stakeholders have focused on the importance of education and manpower development to the nation's progress. Many developing nations have committed their riches to the establishment of educational institutions at different levels because they believe that education is a potent tool for development. However, during the past few decades, the argument over Nigeria's declining educational standards has dominated public conversation, and it will continue for some time to come.

A high teacher-to-student ratio, a lack of qualified teachers (human resources), a lack of funding, political unpredictability and the politicization of educational programs, and insufficient infrastructure—essential physical facilities and equipment—have all been connected to poor academic performance. Ekundayo and Alonge (2012) linked the issue of pupils' declining academic performance to a number of issues, including the caliber of teachers, family and governmental factors, and the lack of educational resources. For them, human resources are a special educational input required for the total development of students' skill acquisition and literacy, and the availability of educational resources is crucial due to its role in achieving educational objectives.

Ogbodo and Nwaoku (2007) assert that there is no question about the strategic role that institutions play in country development throughout the world. It is impossible to overstate their contributions to the social, political, and economic advancement of a country.

Adequate teaching and learning facilities, such as classrooms, instructional materials, qualified teachers, and supportive services, should be given in the school, according to the physical infrastructure. Other factors that impact pupils' academic performance or achievement include

libraries, technical workshops, labs, computers, etc. Oluchukwu, 2002; Ajayi, 2001). Therefore, inadequate infrastructure is still a crucial topic that has to be researched and addressed in order to improve kids' academic achievement.

The aforementioned features of school facilities may have an impact on students' academic performance in addition to the direct effects that inadequate infrastructure has on students' capacity to learn. The combination of inadequate infrastructure, which makes the workplace uncomfortable and unwelcoming for teachers, and frustrating student behavior, such as poor academic performance, lack of motivation, and concentration, creates a stressful set of working conditions for teachers because stress and job dissatisfaction are common precursors to lower teachers' enthusiasm.(McKay, 1964 in Egim, 2003). According to Egim (2003), in order to grow the educational enterprise, educational planners are more focused on issues like the quantity of schools, instructors, and students' infrastructure, including classrooms and school buildings. There is little focus on the infrastructure's quality (Obong, 2010). The physical appearance of the educational Infrastructure is important in encouraging healthy academic exercise. It serves as the center of gravity for all other activities. This is due to the fact that it creates a mental environment that is conducive to learning. According to the National Teachers' Institute, school supervision and sanitation are essential (NTI, 2008; McKay, 1964 in Egim, 2003).

These could affect the quality of the learning infrastructure. This phrase encompasses all of a school district's trash management initiatives, drainage patterns, as well as educational facilities). Greening the educational environment is also essential. According to Sanitation Connection (2001/2002), a school administration that provides sanitation and the planting of flowers and trees, as well as the maintenance of law and well-kept classes, among other things, improves the quality of life and students' academic performance.

Another facet of school administration is the infrastructure's aesthetics. A tranquil setting for mind molding is created by routine painting and building quality maintenance, sewage channeling, carefully planned landscaping and

flower pruning, grass removal, appropriate rubbish disposal, sweeping and removing bug webs, and other tasks. The aforementioned issues are all instances of school environmental management strategies that could make a school a desirable location for children to go.

School facilities are tangible resources that improve teaching and learning, giving the process meaning and purpose. This is one of the many aspects that affect the quality of education provided by teachers and the academic success of students in any school. Those concerned in the students' education must give them a definitive, physical, and social intellectual education in order to supply them with appropriate and sufficient knowledge. Infrastructure that improves the teaching and learning process must guarantee the accessibility and efficient utilization of educational resources. Using instructional strategies that promote pupils' cognitive growth Secondary school buildings, libraries, laboratories, good roads, pipe-borne water, power supply, communication, and health services are examples of infrastructure for teaching.

Statement of the Problem

The duration of Inadequate facilities, such as libraries, classrooms, staff rooms, technical workshops, laboratories, and inadequate equipment, such as teaching aids and instructional materials, are among the issues that schools encounter, the researcher noted during our research and teaching practice. This issue has made teaching and learning extremely difficult and has hampered secondary school pupils' academic progress.

The academic achievement of secondary school students has been a topic of significant concern. This study is supported by students' low performance, especially in the National Examination Council SSCE/NECO and Senior Secondary Certificate Examination. Thus, the impact of inadequate infrastructure on students' academic performance is a significant issue that is frequently addressed both inside and outside of academic circles. Based on the aforementioned, this study explores the idea of academic performance in connection to learning resources, school infrastructure, and academic accomplishment. Due to pupils' poor academic

performance and lack of interest in learning, most secondary schools confront difficulties. A large portion of students do extremely poorly in WAEC and NECO, which is linked to a shortage of professional teachers, indolent teachers, and inadequate teaching and learning facilities and equipment.

Research Questions

The following research questions were raised to guide the study

1. What is the importance of Infrastructure on students' academic performance?
2. What is the impact of poor Infrastructure on students' academic performance in secondary schools?
3. What are the major factors that hinder the academic performance of students in Akwanga secondary schools?
4. To what extent Government afford to put in place the necessary infrastructural materials required for teaching and learning in Secondary schools?

Materials and Methods

The survey design used in the study is descriptive. Consequently, a survey research strategy was employed in the study. The technique adheres to the processes of scientific inquiry, which include problem identification, problem description and delineation, problem analysis, deductions, and application of suggested solutions. Because the approach aids the researcher in describing, examining, recording, and interpreting the variables included in this study, it was deemed most appropriate and adequate.

A questionnaire created by the researcher served as the primary tool for gathering data for this investigation. Five main ideas served as the foundation for the questionnaire's construction. 1. Strongly Concur (SD) 2. Concur (A) 3. Indecisive (UD) 4. Disagree (D) 5. Disagree strongly (SD). Two parts were added to the questionnaire. While Section B contains items that elicit responses on the study's variables, Section A contains primary/demographic data about the teachers, such as age, sex, marital status, and educational attainment. The participants were given the questionnaire directly by the researcher. With the head of

school's consent, the randomly chosen schools were visited, and 120 questionnaires were distributed.

The data was analyzed using statistical package for the social sciences (SPSS) for this study. Inferential statistics, like chi-square, were used to test the stated hypothesis, whereas descriptive statistics, such as tables, frequencies, and percentages, were used for other data analysis.

Results

The findings of the study are presented in tables

Sourer: Field Survey, 2025.

S/N	Item	S A	A	D	S D	M	Std.	Remark
1	Infrastructure is important; it creates better spaces for children and increases the efficiency of investments in educational activities.	5 9 (37.1)	5 5 (34.6)	2 2 (13.8)	2 3 (14.5)	3 . 9	17.4	Accepted
2	Infrastructure stimulates learners' interest as they are made to personally engage in useful scientific activities and experimentation.	4 8 (49.1)	1 2 (7.5)	4 3 (27.0)	2 6 (16.4)	3 . 2	14.3	Accepted
3	Infrastructure such as Laboratories plays a vital role in providing Practical Knowledge through laboratory work to promote long-term memory.	2 3 (14.5)	2 2 (13.8)	5 5 (34.6)	5 9 (37.1)	1 . 9	17.3	Rejected
4	Infrastructures make Teaching and learning real than a mere verbal conversation and create Teachers-students interaction.	1 8 (11.3)	8 7 (54.7)	3 0 (18.7)	2 4 (15.1)	3 . 9	25.4	Accepted

The results present a survey or study that aimed to investigate the opinion of respondents about the importance of infrastructure on students' academic performance in secondary schools. The respondents were asked to rate their opinions on different statements related to this topic. The responses were collected and summarized in the table, including the frequency of responses, percentages, mean (M), standard deviation (Std.), and a remark indicating whether the statement was accepted or rejected.

below according to the research questions that guided the study.

Research Question One: What is the importance of Infrastructures on the students' academic performance in secondary schools?

Table 1: Descriptive statistics showing the opinion of the respondents on infrastructure on the student's academic performance in secondary schools

S/N	Item	S A	A	D	S D	M	Std.	Remark

Research Question Two: What is the impact of poor infrastructure on the students' academic performance in secondary schools?

Table 2: Descriptive Statistics showing the opinion of the respondents on the impact of poor infrastructure on the students' academic performance in secondary schools

1	Poor availability of facilities affects productivity efficiency during the Teaching and learning process.	7 (45.9)	3 (14.5)	2 (20.6)	3 (18.8)	9	19.11	Accepted
2	Poor Infrastructure affects the learner's interest and readiness during the Teaching and learning process.	4 (30.2)	8 (28.9)	4 (22.0)	6 (18.8)	5 (18.8)	3 . 9	7 . 4 6
3	Poor results in WAEC and NECO are not caused by the lack of ready-made school infrastructure.	1 (8.8)	4 (5.7)	9 (37.7)	0 (47.8)	6 (47.8)	2 . 1	2 9 . 2
4	Lack of building or classroom capacity makes learning difficult, unstable, and stressful.	6 (38.4)	1 (37.1)	5 (17.0)	9 (7.5)	2 (7.5)	7 (7.5)	3 . 1

Source: field survey, 2025.

The table presents the findings of a study that aimed to explore the impact of poor infrastructure on students' academic performance in secondary schools. The respondents were asked to rate their opinions on different statements related to this topic. The table provides a summary of the responses, including the frequency of responses, percentages, mean (M), standard deviation (Std.), and a remark indicating whether the statement was accepted or rejected.

Research question three: What are the major infrastructures that hinder the academic performance of students in secondary schools?

Table 3: Descriptive Statistics showing the opinions of the respondents

S/N	I t e m s	S A	A	D	S D	M	Std.	Remar k
1	Lack of Laboratories prevents Students from having practical classes often	2 (14.5)	3 (13.8)	2 (13.8)	5 (34.6)	5 (37.1)	1 . 9	17.3
2	Absence of textbooks prevents the students from carrying out self-research During the course of their studies	1 (11.3)	8 (54.7)	7 (54.7)	3 (18.7)	2 (15.1)	3 . 9	25.4
3	Lack of availability of school playing ground and recreation center prevent the students from extracurricular activities.	7 (45.9)	3 (14.5)	2 (14.5)	3 (20.6)	3 (18.8)	2 . 9	19.1
4	Teaching without enough Classroom building and space, instructional materials make Teaching ineffective.	4 (30.2)	8 (28.9)	6 (28.9)	5 (22.0)	3 (18.8)	3 . 9	7.46

The table presents the findings of a study that aimed to identify the major infrastructures that hinder students' academic performance in

secondary schools. Respondents were asked to rate their opinions on various statements related to this topic. The table summarizes the

responses, including the frequency of responses, percentages, mean (M), standard deviation (Std.), and a remark indicating whether the statement was accepted or rejected.

Research question four: What extent that the Government afford to put in place the necessary

Source: field survey, 2025.

S/N	Item	S	A	A	D	S	D	M	Std.	Remark
1	Government is able to renovate the school buildings to makes Teaching and learning well organized.	2 (14.5)	3 (13.8)	2 (13.8)	5 (34.6)	5 (37.1)	9	1 . 9	17.3	Accepted
2	Governments inability to supply necessary infrastructure affect Teaching and learning of Secondary School students	1 (11.3)	8 (54.7)	8 (54.7)	3 (18.7)	0 (15.1)	2 (15.1)	3 . 9	25.4	Accepted
3	Governments are able to provide learning materials such a textbook, specimen, models and computers for making learning more concrete and interested for the students.	7 (45.9)	3 (14.5)	2 (14.5)	3 (20.6)	3 (18.8)	0 (18.8)	2 . 9	19.1	Accepted
4	Governments play a vital role in prompt payment of teachers' salaries and organizing workshops to ensure effective teaching and learning.	4 (30.2)	8 (28.9)	4 (28.9)	6 (22.0)	3 (18.8)	0 (18.8)	3 . 9	7.46	Rejected

The table presents the findings of a study that aimed to identify the Extent at which Governments are able to provide the necessary school Infrastructure.

Respondents were asked to rate their opinions on various statements related to this topic. The table summarizes the responses, including the frequency of responses, percentages, mean (M), standard deviation (Std.), and a remark indicating whether the statement was accepted or rejected.

Conclusion

Based on the findings, it can be concluded that infrastructure plays a crucial role in students' academic performance in secondary schools. Poor infrastructure negatively impacts productivity, learner interest, and overall academic outcomes. Adequate availability of

infrastructural materials required for the teaching and learning in Secondary schools?

Table 4.: Descriptive Statistics showing the opinion of the respondent's

facilities, textbooks, classrooms, and instructional materials contributes to effective teaching and learning.

Recommendations:

Base on the findings above the research recommends the followings:

1. Government and educational authorities should prioritize investments in infrastructure to create conducive learning environments. Adequate facilities, classrooms, laboratories, and instructional materials should be provided to enhance students' academic experiences.
- Efforts should be made to ensure that students have access to textbooks, as they play a vital role in self-research and independent learning. Schools should collaborate with publishers and stakeholders to ensure textbook availability.

2. Availability of school playing grounds and recreation centers should be promoted to encourage students' participation in extra-curricular activities. Such activities contribute to holistic development.
3. Teachers should receive training and support to effectively utilize available infrastructure and instructional materials. Effective teaching practices can mitigate the impact of poor infrastructure.
4. While addressing infrastructural challenges, schools should also focus on improving students' exam preparation strategies to enhance their performance in external exams like WAEC and NECO.
5. Existing infrastructure should be regularly maintained and repaired to ensure their functionality and longevity.
6. Further research is recommended to explore additional factors influencing students' academic performance and to validate the findings in different contexts.

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