

**PERCEIVED INFLUENCE OF EDUCATIONAL FACILITIES ON STUDENT'S
ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN AWKA
NORTH LGA, ANAMBRA STATE**

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Abstract

The purpose of the study was to determine the perceived influence of educational facilities on student's academic performance in public secondary schools in Awka North Local Government Area of Anambra State. Two research questions guided the study and two hypotheses were tested at 0.05 level of significance. Descriptive survey research design was adopted for the study. The population of the study comprised 178 public secondary school teachers in the 10 public secondary schools in Awka North LGA of Anambra State. The entire population of the study was used. Data collected by the researcher was titled Questionnaire on Influence of Educational Facilities on students' Academic Performance in Public Secondary Schools (QIEFSAPS). The instrument was validated by three experts in the Faculty of Education, Nnamdi Azikiwe University Awka. Two from the Department of Educational Management and Policy and one from Department of Educational Foundation. The reliability of the instrument was established through a pilot test. The data collected were analyzed using Cronbach Alpha. This yielded co-efficient values of 0.76 and 0.84 for clusters 1 and 2 respectively with a general reliability co-efficient of 0.80. Data were analyzed using mean, standard deviation and t-test. Findings revealed that school library and

school laboratory positively influence students' academic performance in public secondary schools Awka North LGA to a high extent. The researcher concluded that educational facilities positively influence students' academic performance in public secondary schools in Awka North LGA. Based on the findings, the study recommended, among others that the Post Primary Schools Services Commission (PPSSC) should prioritise the provision, maintenance and upgrading of school libraries to enhance students' academic performance.

Keywords: Academic Performance, Educational facilities, School Library, School Laboratory, Secondary Schools

Introduction

Education has been adopted as an instrument for national development. It is a long term investment by the state for its continuous existence, presentation of its cultural values, and improvement of the society.

Secondary school education is the form of education students receive after primary school and before the tertiary level of education. Public secondary schools are educational institutions that provide secondary-level education and are funded, managed and supervised by the government; either at the federal, state, or local level (Byerengo and Onyango, 2021). These schools are established to offer affordable and accessible education to the general public, often following a nationally approved curriculum and serving students who have completed primary education and are preparing either for higher education or for vocational and technical careers. Public secondary schools operate under the guidelines of the Federal Republic of Nigeria's National Policy on Education and are typically tuition-free or low-cost, making them accessible to a larger segment of the population. They aim to promote national development by ensuring equity, standardisation and broad participation in education. The broad goals of secondary education in Nigeria are preparing people for useful living in the society and for higher education (FRN, 2013). The secondary level of education in Nigeria is geared to cater for disparities in abilities, opportunities and future responsibilities, as well as to deliver technical knowledge and vocational skills required for agricultural, industrial, commercial and economic development. The realization of the goals of secondary education is reflected in secondary school students' academic performance.

Academic performance, according to Bakare and Solomon (2022), is the knowledge or abilities learned in school subjects, as measured by test results or marks awarded by the instructor. According to Ifelunni, Ugwu, Aneke, Ibiam, Ngwoke, Ezema, Oraelosi and Ede (2019), academic performance is the result of a student's learning effort in the school context. It is the total academic output of students at a school. It is evaluated through the use of a teacher rating test and an examination. Academic performance refers to a person's outcomes in a certain academic area, such as mathematics, English, or science. Through the use of questions and answer options in examinations, students attempt to solve problems as part of the cognitive and mental process of learning. Academic performance, therefore relates to the percentage of marks students received on their most recent examinations (Nwanze, Konyefa and Ezeanya, 2021). In the context of this study, academic performance is seen as the measure of students' intellectual progress. It has to do with what a learner is able to accomplish by execution of class work in the school. The realization of high academic performance among secondary school students could be dependent on educational facilities in the school.

Educational facilities encompass both physical infrastructure and resources essential to support teaching and learning. Educational facilities are the physical infrastructure, resources and equipment available in a school to support teaching and learning. Adapting this view, Nasrudin and Maryadi (2019) extended the definition to include buildings, furniture, tables, seats, teaching tools and media that are directly utilized or support educational processes. Similarly, Awaludin and Saputra (2016) stated that educational facilities consist of both fixed infrastructure such as classrooms and mobile equipment such as teaching aids. More broadly, Mkwama (2023) defined educational facilities as the entire school plant harnessed for efficient institutional management. According to Manafa and Ofojebe (2022), these facilities include consumables, electricity, water and playgrounds. Busa, Shamsudeen and Pofung (2024) stated that educational facilities include buildings, classrooms, specialized laboratories, cafeterias, media centers, furnishings and related exterior facilities. In this stand, secondary education being pertinent in this study deserves good facilities for effective performance of students. Inclusively, educational facilities were classified into two groups; school library and school laboratory.

A school library is a collection of sources of information and similar resources, made accessible to a defined community for reference or borrowing. It provides physical or digital access to material and may be a physical building or room, or a virtual space, or both. A library's collection includes books, periodicals, newspapers, manuscripts, films, maps, prints, documents among others. The Federal Ministry of Education in its Minimum Standards for School Libraries (2019)

states that availability and accessibility of library resources and services increase student's library use. Suleiman, Hanafi and Tanslikhan (2018) opined that access and frequent use of school library resources by students influence their academic performance and achievement in schools. Furthermore, public secondary schools also require school laboratory.

A school laboratory is an important and an integral part of the educational system. It is quite essential for obtaining qualitative and quantitative education. Akani (2015) posited laboratory as a room or building equipped and set apart for practical or experimental studies to take place. Akani (2015) aptly put laboratory as the heart of a good scientific programme which allows students to have experience which are consistent with the goals of scientific literacy. Laboratory has been conceptualized as a room or a building specially built for teaching by demonstration of theoretical phenomenon into practical terms by science teachers. School laboratory contains the resources, equipment and apparatus for science teaching ranging from easily consumable supplies to full range of facilities needed for effective teaching and learning of science (Muhammad & Ubendu, 2021). The provision of adequate laboratory facilities makes science learning easier because students can actually learn through practical and interactive approaches. Laboratory works stimulates learners' interests as they are made to personally engage in useful scientific activities and experimentation; promotes the idea that science is not only products or process; affords the learner the basic skills and scientific method of problem solving (Muhammad and Ubendu, 2021).

These educational facilities can significantly influence students' academic performance. School library, and laboratories, provide the physical and technological resources necessary for effective learning and intellectual development. Crisp et al. (2019) aptly put that well-equipped academic environments enhance student engagement and academic outcomes by fostering active learning. Recreational facilities, including gymnasiums and student lounges, support physical and mental well-being, which are critical for academic success. Reynolds and Ibrahim (2017) asserted that high-recreational facilities contribute to student satisfaction, enabling better focus on academic pursuits. These views however, have not been empirically determined to be true in Awka North Local Government Area of Anambra State. It is against this background that the researcher sought to determine the perceived influence of educational facilities on student's academic performance in public secondary schools in Awka North Local Government Area (LGA) of Anambra State.

Statement of the Problem

The persistent poor academic performance of students in Awka North Local Government Area has become a critical concern for educators, parents and policymakers. This declining performance not

only jeopardises the future opportunities of individual students but also poses a broader threat to the educational and socio-economic development of the LGA and Anambra State as a whole. When students consistently perform below expectations, it limits their chances of progressing to higher levels of education, reduces employability and ultimately undermines the region's human capital development. During field observations conducted by the researcher in selected public secondary schools across the state, it was noted that many schools appear to be grappling with significant infrastructural and material deficiencies. In several cases, schools lacked basic instructional materials, chairs and tables for students, adequate toilet facilities and recreational spaces that are essential for student well-being and effective learning. The absence of these facilities not only hampers the delivery of quality education but may also contribute to students' disengagement and poor academic outcomes. These observations raise an important question: could the apparent lack of educational facilities be a major factor influencing the poor academic performance of students in Awka North LGA? This question forms the basis of the present study, which sought to determine the perceived influence of educational facilities on student's academic performance in public secondary schools in Awka North LGA of Anambra State.

Purpose of the Study

The main purpose of the study was to determine the perceived influence of educational facilities on student's academic performance in public secondary schools in Awka North Local Government Area of Anambra State. Specifically, the study sought to:

1. determine the influence of school library on students' academic performance in public secondary schools in Awka North Local Government Area of Anambra State; and
2. ascertain the influence of school laboratory on student's academic performance in public secondary schools in Awka North Local Government Area of Anambra State.

Research Questions

The following research questions guided the study:

1. To what extent does school library influence students' academic performance in public secondary schools in Awka North Local Government Area of Anambra State?
2. To what extent does school laboratory influence student's academic performance in public secondary schools in Awka North Local Government Area of Anambra State?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. There is no significant difference in the mean ratings of male and female teachers on the influence of school library on student's academic performance in public secondary schools in Awka North Local Government Area of Anambra State.
2. There is no significant difference in the mean ratings of male and female teachers on the influence of school laboratory on student's academic performance in public secondary schools in Awka North Local Government Area of Anambra State.

Method

The study adopted descriptive survey research design. The population of the study comprised all the teachers from 10 public secondary schools in Awka North L.G.A, Anambra State with the teachers numbering 178. There was no sampling. The researcher designed an instrument titled “Questionnaire on Influence of Educational Facilities on Students’ Academic Performance in Public Secondary Schools (QIEFSAPS) which was used for data collection. The instrument contained 16 item questionnaires structured four point weighting scale. There was face and content validation which was carried out by experts in the relevant discipline. The reliability of the instrument was determined through a pilot study involving 20 teachers from public secondary schools in Awka South L.G.A. The data obtained were analyzed using Cronbach’s Alpha, yielding reliability coefficients of 0.76 and 0.84 respectively with an overall reliability coefficient of 0.80. The questionnaires were administered to teachers with immediate retrieval where possible. Follow-up visits were scheduled which lasted for three weeks to ensure high return rate. This allowed 148 copies of questionnaires to be returned out of 178 distributed which gave rise to 82% return rate.

The data collected were analyzed using mean to answer the research questions and t-test for testing the hypotheses at the 0.05 level of significance.

Results

Research Question One

To what extent does the school library influence students' academic performance in public secondary schools in Awka North Local Government Area of Anambra State?

Table 1: Mean Ratings on the Influence of the School Library on Students' Academic Performance in Public Secondary Schools in Awka North LGA (N = 148)

S/N	Item Statements: Extent to which the school library influences students' academic performance	Mean	SD	Remarks
1	Availability of a well-equipped library enhances students' access to quality learning resources	3.56	0.84	Very High Extent
2	Access to relevant textbooks and reference materials in the library improves academic outcomes	3.48	0.89	Very High Extent
3	A quiet and conducive library environment supports students' concentration and study habits	3.42	0.90	High Extent
4	Regular use of the library encourages independent learning among students	3.39	0.88	High Extent
5	Availability of internet services in the library enhances students' research skills	3.45	0.86	Very High Extent
6	Updated library collections support curriculum-based learning and exam preparation	3.31	0.91	High Extent
7	Guidance by library staff helps students locate and use academic materials effectively	3.44	0.87	Very High Extent
8	Frequent library usage is associated with higher academic achievement among students	3.38	0.85	High Extent
Cluster Mean		3.43		High Extent

Data in Table 1 reveals that respondents perceived the school library as having a very high extent of influence on students’ academic performance in public secondary schools in Awka North LGA. The mean ratings, ranging from 3.31 to 3.56, show strong agreement that the school library plays a vital role in academic success. The standard deviation values (0.84 to 0.91) indicate that responses were relatively consistent. The cluster mean of 3.43 affirms that the school library significantly influences students’ academic performance in Awka North LGA.

Research Question Two

To what extent does school laboratory influence students’ academic performance in public secondary schools in Awka North Local Government Area of Anambra State?

Table 2: Mean Ratings on the Influence of School Laboratory on Students Academic Performance in Public Secondary Schools in Awka North LGA (N=148)

S/N	Item Statements: Extent to which school laboratory influence students’ academic performance	Mean	SD	Remarks
9	Availability of a well-equipped laboratory enhances students’ understanding of science concepts	3.40	0.87	High Extent
10	Regular laboratory experiments improve students’ performance in science subjects	3.38	0.90	High Extent
11	Access to laboratory equipment fosters hands-on learning	3.35	0.85	High Extent
12	Adequate laboratory space provides a conducive environment for practical sessions	3.32	0.88	High Extent
13	Supervised practical work increases students’ confidence in applying theoretical knowledge	3.29	0.89	High Extent
14	Integration of laboratory work with classroom teaching enhances students’ comprehension	3.36	0.86	High Extent
15	Safety measures in laboratories allow effective learning	3.34	0.84	High Extent

16	Regular maintenance of laboratory facilities supports consistent science instruction	3.37	0.83	High Extent
Cluster Mean		3.35	High Extent	

Data in Table 2 shows that respondents rated the influence of school laboratory on students' academic performance in public secondary schools in Awka North LGA as high extent. The mean ratings for the items range from 3.29 to 3.40 which indicates that school laboratory are perceived to influence academic performance to a high extent. The standard deviation values between 0.83 and 0.90 reflect close agreement among respondents regarding the extent of this influence. The cluster mean of 3.35 further indicates that school laboratory influences students' academic performance in public secondary schools in Awka North LGA to a high extent.

Table 3: Independent Samples t-test Analysis of the Difference in the Mean Ratings of Male and Female Teachers on the Influence of School Library on Students' Academic Performance in Public Secondary Schools in Awka North LGA

Gender	N	\bar{X}	SD	df	t-cal	p-value	Decision
Male	38	3.21	0.41	146	0.41	0.68	Not Significant
Female	110	3.18	0.39				

The result presented in Table 3 shows that there is no statistically significant difference in the mean ratings of male and female teachers on the influence of school library on students' academic performance in public secondary schools in Awka North Local Government Area of Anambra State. This is evidenced by the obtained p-value ($p = 0.68$), which is greater than the 0.05 level of significance. Consequently, the null hypothesis is not rejected. This finding implies that both male and female teachers share similar perceptions regarding the role of school library facilities in enhancing students' academic performance, irrespective of gender differences.

Table 4: Independent Samples t-test Analysis of the Difference in the Mean Ratings of Male and Female Teachers on the Influence of School Laboratory on Students' Academic Performance

Gender	N	Mean (\bar{X})	SD	df	t-cal	Sig. (p)	Decision
Male	38	3.27	0.44				
				146	0.36	0.72	Not Significant
Female	110	3.24	0.42				

The result in Table 4 indicates that there is no statistically significant difference in the mean ratings of male and female teachers on the influence of school laboratory on students' academic performance in public secondary schools in Awka North Local Government Area of Anambra State. The p-value obtained ($p = 0.72$) exceeds the 0.05 level of significance, leading to the non-rejection of the null hypothesis. This suggests that male and female teachers do not differ significantly in their views on the importance of school laboratory facilities to students' academic performance in public secondary schools in Awka North Local Government Area of Anambra State.

Discussion

The finding of the study revealed that the school library influences students' academic performance in public secondary schools in Awka North LGA to a high extent. This suggests that the availability, quality and functionality of school libraries play a crucial role in supporting effective teaching and enhancing students' learning outcomes. Two possible reasons for this finding are, first, that well-equipped school libraries promote students' engagement, concentration and comprehension during study sessions and assignments, leading to better academic performance. Second, school libraries provide access to a wide range of educational materials and promote independent learning habits that are critical to mastering curricular objectives. This finding aligns with Jaja and Udumukwu (2023) who found that school library utilization significantly influenced students' academic achievement in public secondary schools in Abuja FCT. Similarly, Ali, Grema and Isa (2017) determined that there was a strong positive relationship between access to school library services and academic performance among senior secondary school students in Maiduguri Metropolis, Borno State. Furthermore, Nweze, Udu and Okpala

(2022) revealed that the use of library resources improved the academic ability levels of Chemistry students in Enugu State when compared to students taught without the aid of such resources. Furthermore, finding of the study revealed that male and female teachers did not differ in their mean ratings on the influence of school library on students' academic performance in public secondary schools in Awka North Local Government Area of Anambra State. This finding shows that teachers irrespective of their gender agreed that school library positively influence students' academic performance in public secondary schools in Awka North Local Government Area of Anambra State.

The finding of the study revealed that the school laboratory influences students' academic performance in public secondary schools in Awka North LGA to a high extent. This suggests that the availability, adequacy and functionality of school laboratories contribute significantly to creating a conducive environment for teaching and learning. Laboratories, though subject-specific, play an essential role in reinforcing theoretical concepts through hands-on experiences, which ultimately affects students' academic progress. One possible reason for this finding is that the presence of a well-equipped laboratory promotes active and practical engagement with the curriculum, allowing students to apply knowledge in real-life contexts and thus deepen understanding. Another explanation is that laboratory-based instruction enhances interest, motivation and retention, all of which are critical to academic success, especially in science subjects. This finding is in agreement with Ugwuoti and Ugochukwu (2022) who revealed a significant difference in achievement scores between students taught with laboratory facilities and those taught without, highlighting the value of practical laboratory experiences in improving learning outcomes. Similarly, Imoh (2023) reported that there was a significant relationship between availability of laboratory facilities and students' academic performance. Furthermore, finding of the study revealed that male and female teachers did not differ in their mean ratings on the influence of school laboratory on students' academic performance in public secondary schools in Awka North Local Government Area of Anambra State. This finding shows that teachers irrespective of their gender agreed that school laboratory positively influence students' academic performance in public secondary schools in Awka North Local Government Area of Anambra State.

Conclusion

Based on the findings of the study, the researcher concluded that educational facilities have a positive influence on students' academic performance in public secondary schools in Awka North

Local Government Area of Anambra State. These facilities contribute to creating a stable and conducive school environment where students' academic needs are met, enabling them to concentrate on their academic goals.

Recommendations

Based on the findings of this study, the researcher proffered the following recommendations:

- * The Post Primary Schools Services Commission (PPSSC) should prioritise the provision, maintenance and upgrading of school libraries to enhance students' academic performance. This can be achieved through public-private partnership arrangements involving corporate bodies, NGOs and alumni associations.
- * The federal, state and local governments should work together to mobilise resources for the provision and regular maintenance of school laboratories in public secondary schools. This includes equipping laboratories with modern scientific apparatus and ensuring their effective use during science instruction to improve students' academic outcomes.

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