

## THE INFLUENCE OF LEARNING ENVIRONMENT ON THE ACADEMIC PERFORMANCE OF PUBLIC SECONDARY SCHOOL STUDENTS IN DELTA CENTRAL SENATORIAL DISTRICT OF DELTA STATE, NIGERIA.

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### Abstract

*This article examines the impact of learning environments on public secondary school students' academic performance in Delta Central Senatorial District of Delta State, Nigeria. A positive learning educational environment supports effective teaching and learning and thus enhances students' academic performance. This study adopted a descriptive study design. The study population included 6,122 public high school teachers (session 2021/2022) in the Delta Central Senatorial District of Delta, Delta State. A sample of 125 teachers (70 males and 55 females) were selected by stratified random sampling. Two research questions*

*and two hypotheses guided this study. The tool used as a data collection tool consists of 10 questions. The research questions were analyzed with mean and standard deviation using a 2.50 scale for acceptance level and a chi-square contingency table to test the null hypotheses at a significance level 0.05. The research results show that teachers of both genders agree that the learning environment impacts students' learning and that teachers' being qualified and disciplined can affect students' learning. It was recommended, among other things, that the government should provide suitable school facilities in public secondary schools and ensure that only qualified and well-trained teachers of good character work as teachers in schools.*

**Keywords:** Learning Environment, Academic Performance, Secondary Schools, Students, Qualified Teachers.

### Introduction

Education is generally seen as a tool for the country's development. It underlies literacy, cognitive skills, technological progress, and the ability to use people and materials to achieve social goals (FRN, 2004). Education is a process in which personal skills and abilities are developed. It is realizing human potential so that a person can become something more than before.

According to Morris and Soloway (2014), education is a community-building process for young people to learn and understand the past, participate in society, and contribute to development. Ezike (2018) recognized education as the process by which society intentionally transfers knowledge, values, and skills from one person to another through schools, colleges, universities, and other institutions. This is necessary to prepare students to be competent and useful citizens. The school's specific mission is to influence children and help them acquire skills that affect many aspects of their education. It can be said that the school environment plays an important role in a student's success.

Secondary school is the level of education after primary school. While Adamu (2015) finds secondary schools to provide vocational education with pre-university courses generally, Orlu (2013) finds them to be a school for young people aged 11 to 18 years. Children receive this type of education after primary and before higher education.

An environment can be defined as how living organisms interact with the physical elements. A learning environment is where students interact with the learning environment to form positive relationships and confront social problems. The learning environment includes

classrooms, libraries, technical education, laboratories, family background, quality teachers, school administration, curriculum, and others, which are differences that affect student learning (Ajayi, 2007). Therefore, the learning environment remains an important factor that must be studied and managed to improve student learning.

Academic success refers to an individual's achievement of goals that are core activities in a learning environment, particularly in schools or colleges. In many parts of the world, the problem of inadequate education of students has long been a concern of parents, teachers, governments, and even students.

The school learning environment is conducive to effective teaching and learning. Olutola (2008) argues that the school's learning environment, which includes classrooms, offices, recreational spaces, offices, and play areas, is critical to facilitating teaching and learning. In the narrower sense, the learning environment is the traditional classroom. In the broader sense, non-formal learning processes combine in-school and out-of-school learning environments to achieve objectives. A supportive learning environment is important to students' academic, emotional, and social relationships in schools. It didn't happen by chance. Programs that promote learning in the classroom, such as positive communication with students and good behaviour, should be designed with that in mind. The extent to which a student can learn better depends on their location in the school, the structure of the classroom, and the availability of teaching facilities and equipment. Schools with a good learning environment are believed to contribute to the need for learning by supporting teaching and learning, thus promoting learning outcomes (Duruji et al., 2014). Therefore, this study is on secondary school students' learning environments and academic performance in Delta Central Senatorial District, Delta State, Nigeria.

### **The Influence of Learning Environment on Students' Learning**

The problem of poor learning among Nigerian students has always been a concern of the government, parents, teachers, and even the students. The quality of education depends not only on teachers' doing their job but also on the quality of educational administration (Ajao, 2001). The poor performance of secondary school students may affect the learning environment.

Akande (1995) argues that learning can occur through interaction between humans and their environment. This environment defines opportunities available to support student learning. It includes books, audiovisual, software, hardware, and instructional technology, i.e., classroom size, seating arrangement and layout, tables, chairs, chalkboards, and dish racks. Tsvaga (2011) found that the learning environment is important in determining how students respond to environments and situations. The learning environment often determines how students behave and interact. The desire for both qualitative and quantitative education has multiplied the problem of providing an effective and supportive learning environment for teaching and learning. More and more students are enrolled in Nigeria, but there is little or nothing to improve the learning environment to facilitate teaching and learning. Aneke and Akpusugh (2022) argue that important factors affecting a student's learning in secondary school are school climate, curriculum, discipline, body type, teacher qualification, location, and size. Schools with good environments, teachers, teaching materials, and physical facilities create better school leavers.

According to Adzembra (2006), learning is a permanent change in behaviour resulting from practice and knowledge. The school environment refers to the environment around the school, such as classrooms, cafeterias, exam rooms, and playgrounds. These areas need good

infrastructure, teachers, leadership, and appropriate textbooks for effective and efficient learning. Similarly, Aneke and Akpusug (2022) believed that a good learning environment would lead to better grades.

Many studies have found that the learning environment is crucial to student learning. Shamaki (2015) conducted a study to determine the impact of the learning environment on the academic performance of secondary school students in Yobe State, Nigeria, and found a difference between the average performance of students who study in a good learning environment and those who learn in a boring learning environment. In a similar development, Mudassir and Norsuhaily (2015) conducted a study in Kuala Terengganu to examine how the school environment affects students' learning in secondary schools. This study shows that students in schools with sufficient space, good teachers, and a good environment perform better than those with limited space, unqualified teachers, and a poor environment. Similarly, Duruji, Azuh, and Oviasogie (2014) investigated the impact of the learning environment on the learning of secondary school students in Ota, Nigeria, in external examinations. This study discusses the state of the learning environment and infrastructure and how well they are managed to impact students' learning positively. In a study on the impact of the environment on teaching and learning in primary and secondary schools in Edo State, Nigeria, Eimuhi and Ogedegbe (2016) examined the environment to determine teaching outcomes at all times and places and adduced that the more enriched learning environment is, the greater and more widespread are the benefits for academic performance and other students' outcomes. In a similar development, Odeh, Oguche, and Ivagher (2015) investigated the impact of the school environment on the learning of secondary school students in Benue State. The results show that school climate, discipline, and sports facilities significantly impact students' learning. This means that schools that do not provide the right facilities and create a good teaching environment will struggle to raise their best students, especially in learning.

### **Statement of the Problem**

The quality of the secondary school learning environment determines when the school's objectives will be achieved. A basic learning environment such as the classroom, cultural and social environment, and appropriate educational cooperation must be effective for effective teaching and learning. These facilities do not exist or are under-resourced and poorly maintained. Several problems that lead to physical weakness seem to plague secondary schools, such as inadequate facilities, old and dilapidated buildings, inadequate teaching materials, and unqualified teachers (Wanjobi, 2011). All of these lead to unsatisfactory academic performance, as evidenced by students who fail internal and external examinations. Despite the Delta State government's efforts to build and improve its public secondary schools, students' performance on internal and external examinations remains below expectations. This poor performance could be attributed to the poor learning environment.

It has been observed that the school learning environment in the study area is nothing to write home about. Infrastructural facilities are dilapidated, and the lack of good teachers and other means of supporting teaching and learning can negatively impact student learning. In this context, this study focuses on the influence of learning environments on students' academic performance in Delta Central Senatorial District of Delta State public secondary schools.

### **Purpose of the Study**

The major purpose of this study is to determine the impact of the learning environment on students' academic performance. In particular, this study will

- i. Determine the influence of school facilities on the academic performance of students.
- ii. Investigate the influence of teachers' qualifications on the academic performance of students.

### **Research Questions**

The following questions guided the study.

1. How do school facilities influence the academic performance of students?
2. How do teachers' qualifications influence the academic performance of students?

### **Hypotheses**

This study tested the hypotheses below.

1. There is no significant difference between male and female teachers' opinions on the influence of school facilities on the academic performance of public secondary school students in Delta Central Senatorial District of Delta State.
2. There is no significant difference between male and female teachers' opinions on the influence of teachers' qualifications on the academic performance of public secondary school students in Delta Central Senatorial District of Delta State.

### **Research Method**

A descriptive research design was used in this study. Approximately 6,122 public high school teachers from Delta Central Senatorial District of Delta State were the subjects of this study. The researchers obtained a total sample of 125 teachers using a simple random sample. There are 3 Senatorial Districts in Delta State, and Delta Central Senatorial District was selected for the study. Then, out of the 9 Local Government Areas in Delta Central Senatorial Districts, 5 Local Government Areas were selected, and 5 public secondary schools were selected from each Local Government Area. Again, 5 teachers were selected from each school, making 25 teachers from each Local Government Area. This now brings the total sample for the study to 125 teachers (both male and female).

Information was collected from participants using a questionnaire called the "Influence of Learning Environment on Student Academic Performance" (ILESAP). The tool consists of 10 items and was validated by experts in the Faculty of Education, University of Delta, Agbor. The instrument consisted of elements organized on a 4-point rating scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The weights were 4, 3, 2, and 1, respectively. To find out the consistency of the items, Cronbach's alpha method was used to test the scale's reliability, and the reliability coefficient of 0.85. was obtained. The researchers worked with two assistants to provide instruments to the participants. The research questions were answered using the mean and standard deviation, the pass rate was calculated at 2.50, and the chi-square test at the significance level of 0.05 was used to test the hypotheses.

### **Presentation of Results**

**Research Question 1:** How do school facilities influence students' academic performance?

**Table 1: Averages and standard deviations for teachers' understanding of the influence of school facilities on students' academic performance.**

S/N	Items	Male teachers			Female teachers		
		X	Std	Rmk	X	Std	Rmk
1.	Poor and inadequate facilities lead to poor academic performance of students	3.17	0.38	Agree	2.99	0.40	Agree
2.	Facilities form one of the potent factors that contribute to the academic performance of students.	3.07	0.36	Agree	2.92	0.39	Agree
3.	Adequate provision of facilities brings about good academic performance of students.	2.95	0.35	Agree	3.03	0.41	Agree
4.	School facilities aid teaching and learning and thus improve students' academic performance.	2.94	0.35	Agree	3.02	0.41	Agree
5	Unattractive school buildings and overcrowded classrooms bring about poor academic performance of students.	3.19	0.39	Agree	3.33	0.45	Agree
	Grand mean & std	3.06	0.37		3.06	0.41	

The data in Table 1 show mean scores and standard deviations for male and female teachers concerning the influence of school facilities on students' academic performance. Both male and female teachers agree on any score above 2.50 average on the scale. This indicates that respondents agreed that all five items are related to students' learning.

**Research Question 2:** How do teachers' qualifications influence students' academic performance?

**Table 2: Mean and standard deviation of male and female teachers' perceptions of the influence of teachers' qualifications on students' achievement.**

S/N	Items	Male teachers			Female teachers		
		X	Std	Rmk	X	Std	Rmk

1.	Teachers effective use of instructional materials affect the academic performance of students	3.20	0.39	Agree	3.20	0.44	Agree
2.	Students who trained professional teachers teach are better than those taught by untrained teachers.	3.11	0.36	Agree	3.45	0.47	Agree
3.	Students who see teachers as role models perform better than those who see nothing good in their teachers.	3.07	0.36	Agree	2.99	0.40	Agree
4.	Effective discipline by teachers in school results in good students' academic performance	3.04	0.36	Agree	3.43	0.46	Agree
5	Indiscipline among teachers results in retarding students' academic performance.	2.99	0.36	Agree	3.44	0.46	Agree
Grand mean & std		3.08	0.36		3.30	0.45	

Table 2 shows the mean scores and standard deviations for male and female teachers for the influence of teachers' qualifications on student learning. Both male and female teachers agreed on any score with an average score of 2.50 or higher. The combined average scores of male and female teachers were 3.08 and 3.30, respectively, indicating that respondents agreed that the teacher design was appropriate for all five student learning factors.

**Hypothesis 1:** There is no significant difference between male and female teachers' opinion on school facilities' influence on students' academic performance in public secondary schools in the Delta Central Senatorial District, Delta State.

**Table 3: Evaluation of the Significant Differences between Male and Female Teachers on the influence of School Facilities on Students' academic performance.**

Teacher	Level of significance				Row total	Critical value
	Strongly Agree	Agree	Disagree	Strongly Disagree		
Male	29 (33)	28 (24)	10 (10)	03 (03)	70	
Female	30 (26)	15 (19)	08 (08)	02 (02)	55	2.60
Column Total	59	43	18	05	125	

Not significant at 0.05,  $df = 3=7.82$

The data presented in table 3 shows that there is no significant difference between the male and female teachers in their opinions on the influence of school facilities on students' academic performance. The calculated chi-square value of 2.60 is below the critical value of 7.82 at 3 degrees of freedom at the 0.05 significance level. We therefore accept the null hypothesis and conclude that both male and female teachers believe that school facilities impact the academic performance of secondary school students in Delta Central Senatorial District. That is, the gender of the teachers has nothing to do with their opinions of students' academic performance.

**Hypothesis 2:** There is no significant difference between male and female teachers' opinions on the influence of teachers' qualifications on the academic performance of secondary school students in Delta Central Senatorial District of Delta State, Nigeria.

**Table 4: Tests for significant differences between male and female teachers regarding the influence of teachers' qualifications on student learning.**

Teacher	Level of perception				Row total	Critical value
	Strongly Agree	Agree	Disagree	Strongly Disagree		
Male	31 (29)	20 (25)	15 (17)	04 (05)	70	
Female	20 (22)	25 (20)	15 (13)	05 (04)	55	3.79
Column Total	51	45	30	09	125	

Not significant at 0.05,  $df = 3 = 7.82$

The information in Table 4 above relates to the second null hypothesis. Statistical analysis shows that the calculated chi-square value of 3.79 is lower than the critical value of 7.82 with 3 degrees of freedom at 0.05 significance level. This means there is no significant difference between male and female teachers in how teacher qualifications affect student learning achievement. Therefore, we accept the null hypothesis and conclude that there is no difference between male and female teachers in public secondary schools in the Delta Central Senatorial area on how teachers' qualifications influence students' learning.

### Discussion of Findings

The results of Test 1 show that there is no significant difference between the opinions of male and female teachers regarding the influence of school facilities on the education of public secondary school students in the Delta Central Senatorial District. Both male and female teachers agree that school facilities can affect students' learning. This finding is consistent with Adzembra (2006), who argues that facilities are an important factor influencing school students' academic performance. These facilities include classrooms, lecture halls, test rooms, libraries, laboratories, furniture, playgrounds, and other teaching materials. This study is also compatible with Mudassir and Norsuhaily (2015), who found that students in schools with sufficient space and a good learning environment perform better than students in private schools, where there is not enough space and the learning environment is not good.

Additionally, Hypothesis Two shows no significant difference between the views of male and female teachers regarding the influence of teachers' qualifications on secondary school students' good learning in the Delta Central Senatorial District. All participants agreed that teachers' qualifications affect students' learning in schools. This finding is consistent with Aneke and Akpusugh (2022), who show teachers' qualifications and discipline as abuses that affect teaching and learning efficiency and reduce students' academic performance. Offenses committed by teachers include absenteeism, cheating on exams, drinking alcohol, and having illegal sex with

students. All this seriously threatens students' learning because teachers, as role models, are responsible for protecting the future and destiny of students and even the country.

### **Conclusion**

This study shows no significant differences in the views of male and female teachers regarding the influence of school facilities on students' learning. In addition, teachers' qualifications and attitudes can also affect students' learning. This means that these places in secondary schools should be a priority for those dealing with education in the state and nationwide. It is believed that the availability of a good educational environment and schools will support the need for education that will increase students' social, political, and economic teaching and learning quality and academic achievement. Therefore, improving the current situation of the poor learning environment and the quality of learning in secondary schools should be monitored promptly among the education stakeholders.

### **Recommendations**

Based on the data obtained, the following suggestions were presented.

1. It is urgent to improve the repair.
2. The state government should provide the necessary school equipment, such as furniture, libraries, and laboratories.
3. Governments and school authorities must ensure that only qualified and well-trained teachers are hired, as a lack of discipline by teachers can negatively affect student learning.

### **Implications for the Study**

1. Designing an effective learning environment: This study can provide insight into the elements of a learning environment that significantly influence students' academic performance.
2. Classroom Management Strategies: The study may shed more light on the impact of various classroom management strategies on students' academic performance.
3. Policy Implications: Policymakers can use this knowledge to shape educational systems and create optimal learning environments for students.
4. Parental Involvement: The study may highlight the role of parental involvement in shaping the learning environment and influencing students' academic performance.
5. Further Research: The study may identify gaps in current knowledge or raise new questions for further research.

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