International Journal of Economics, Environmental Development and Society, 2023, 4(4), 436-447.



# INFLUENCE OF SCHOOL ENVIRONMENT ON ACADEMIC PERFORMANCE OF STUDENTS IN PUBLIC SENIOR SECONDARY SCHOOLS IN YENAGOA METROPOLIS OF BAYELSA STATE

## **Christian Baribor Ndayor GIAMI**

Department of Educational Management
Faculty of Arts & Education
University of Africa, Toru-Orua, Bayelsa State, Nigeria
<a href="mailto:christian.giami@uat.edu.ng">christian.giami@uat.edu.ng</a>

#### **Innocent ALETE-OMONI**

Department of Educational Management Faculty of Education University of Port Harcourt, Nigeria aleteomoniinnocent@gmail.com

\_\_\_\_\_\_

#### **ABSTRACT**

This study investigated influence of school environment on academic performance of students in public secondary schools in Yenagoa metropolis of Bayelsa State. The study adopted descriptive research survey design. Two objectives and research questions guided the study. The population of the study comprised all the nine hundred and eighty-seven (987) teachers in the 17 public senior secondary schools, out of which a sampled size of ninety-nine (99) teachers selected using the simple random sampling technique. Questionnaire was the instrument used for data collection. The respondents of the study responded to a 20item instrument titled: Influence of School Environment on Students' Academic Performance (ISESAPQ), with a reliability index of 0.78. The research questions were answered using mean and standard deviation statistics. The result from the findings revealed that school physical facilities, and learning environment influences to a high extent students' academic performance in public secondary schools in Yenagoa Metropolis, Bayelsa State. The study therefore, recommended that Government should increase budgetary allocation to education that would help cater for the shortfalls in school facilities among others to make the school environment more conducive for effective teaching and learning. The Ministry of Education should provide more desks for students to seat on comfortably during class instruction; equip the libraries with relevant and modern books and provide adequate and modern laboratory equipment for students' practical. The Ministry of Education should make it mandatory that no school administrator admit more than the required number of students per class as recommended in the National Policy on Education. The Ministry of Education should periodically, especially at the beginning of a new session organize seminars, workshops and training that would update teachers knowledge and capacity to deliver on their job performance. Finally, government should introduce security measures that would guarantee relative safety and peace in the school environment that will be a stimulant to students' academic performance in the study area.

Keywords: School Environment, Physical Facilities, Learning Environment, Student, Academic Performance.

Reference to this paper should be made as follows:

Giami, C. B. N., & Alete-Omoni, I. (2023). Influence of school environment on academic performance of students in public senior secondary schools in Yenagoa metropolis of Bayelsa State. *International Journal of Economics, Environmental Development and Society*, 4(4), 436-447.

\_\_\_\_\_\_

Copyright © IJEEDS 2023 [ISSN: 2992-5614].

## **INTRODUCTION**

Education is a process designed to inculcate appropriate knowledge, skills, and attitude necessary to enlighten the individuals to cope effectively with their environment and make meaningful contributions to the overall growth and development of the nation. The role of school environment in achieving quality education cannot be undermined. The school environment plays major role in the life of every individual whether students, teachers, employers or employees. School environment contribute immensely to achieving better student academic performance. The quality of education not only depends on the teachers as reflected in the carrying out of their duties, but also in the effective coordination of the school environment (Ajao in Aneke & Akpusugh, 2022). Hence, the need for proper care and attention to be given to the environment in order to make it not just safe but conducive and comfortable for educational activities to thrive.

Okoro (2014) described environment as a system within which living organisms interact with the physical elements, while educational environment is a place where learners learn to interact with learning facilities in order to be socialized and face the challenges in the society. The individual brings about changes in the environment and the environment to a great extent influences the learner's behaviours (Ukashia, 2010). This means that, a favourable environment is key to a positive, healthy and mental development. Thus, it is believed that the intellectual and moral development of every child is influenced by both hereditary and physical environment (Adele, 2015). Okwelle (2016) referred to environment as the facilities available for instructional delivery and it possess a strong influence in teaching-learning process. He added that there is need for adequate classroom buildings with good sitting arrangements for effective classroom instruction. He went further to state that the availability of well-equipped school library, laboratory, workshop with modern machines, tools and materials for practices are necessary if educational goals will be achieved. In addition, modern instructional materials (non-projected and audio-visual equipment) should be adequately provided for effective instructional delivery.

Miller et al. in Thomas and Amaechi (2019), asserted that school environment is the sum of both human and material resources that the learners interact with. These, include students, teachers, instructors, library and laboratory attendants, administrators and all facilities available in the school setting which may influence learning and academic performance of students. On his part, Zais in Thomas and Amaechi (2019) considered the school environment to include material and human resources, a learning place which consists of the entire interactive setting like classroom, laboratories, workshop, library, field and offices.

A healthy and attractive school environment makes for conducive learning and promotes students' pride in their schools and their interest to stay in school (Mgbodile, 2014). It is evident from experience, that school environment plays a greater role towards the actualization of educational objectives through the forces in the environment that highly influence the growth and development of the students. This is so, as it is a vital stimulus for learning experiences as students spend most of the time in school (Edo et al., 2018). More so, school environment exerts different forms of influence on the learners through contact with varieties of curricula activities, teaching techniques, relationship or mutual cooperation between the school administrators and the students (Arul, 2012).

Little wonder, that Nwizu (2013) warned that the environment in which the learner acquires knowledge has a great influence on the cognitive achievement of the learner. It has also been generally agreed that the quality of learning is markedly influenced by environmental and

organizational factors. In their contributions, Mudassir and Norsuhaily (2015), contend that, when students find their school environment supportive and caring, they are less likely to be involved in substantive abuse, violence and other unnecessary behaviour. This is because a school environment enriched with enough learning facilities provides for greater independent learning or collaborative activities.

The school environments, which include the classroom, libraries, laboratories, technical workshops, teachers' quality, school management, teaching methods, peer groups among others are factors that influence students' academic performance (Von-Stumm et al., 2011). In their separate contributions, Fayose (2016) stated that there is need for standard library to be equipped with relevant books, journals, periodically and many others. While, Puyate (2016) stressed the importance of providing stable electricity supply, good lightening and ventilation and maintain the tidiness of the learning environment. It is therefore obvious, that the school environment remains an important area that should be studied and well managed to enhance students' academic performance.

The learning environment of the students ought to be a priority of the government, educationists and school administrators because learning under a comfortable atmosphere with the combination of other factors, which include the climate, noise control and students' safety goes a long way in promoting effective teaching and learning that would enhance students' academic performance (Murugan & Rajoo, 2013). In other words, efforts should be put in place to create a learning atmosphere that would motivate students to learn willingly for learning sake, as such will result in optimal performance of the students academically.

Academic performance of students is the center around which the whole education system revolves. The success and failure of any educational institution is measured in terms of academic performance of students. Adeyemi in Akomolafe and Adesua (2016), opined that performance is the measure of educational outcome. Academic performance can be viewed as the extent to which an individual learner acts or does a piece of work, how well or poor he/she does the job or the activities within the learning process. According to Narad and Abdullahi (2016), academic performance is the knowledge attained and designated by marks, assigned by the teacher. In educational context, academic performance is the educational goal to be achieved by a student, teachers or institution over a certain period of time and is measured either by examinations or continuous assessments and the goal may differ from one individual or institution to another. Meanwhile, the academic performance of an individual can be influenced by several factors such as personality, intellectual ability, and environment etc.

Sequel to the above reality, it becomes necessary and expedient to carry out this research to investigate the influence of the school environment on the academic performance of students in public secondary schools in Yenagoa Local Government Area of Bayelsa State.

## **Statement of the Problem**

The issue of poor academic performance of students in secondary schools in Nigeria especially Bayelsa State has been of much concern to the government, parents, teachers and even the students themselves. It is understandable, that the quality of education not only depend on the teachers as reflected in the performance of their duties, but also in the effective coordination of the school environment that would enhance optimal students' performance (Bossaert, Doumen & Buyse, 2011).

On this note, the importance of school environment on academic performance of students cannot be over-emphasized. Over the past decades, remarkable studies have indicated a correlation between the school environment and academic performance of students. To this end, no thanks to the seeming neglect of the school environment as many schools are unsuitable for quality educational activities due to the near lack or inadequate classrooms, school facilities and equipment. Worse still, in some areas, the environment is unfriendly, harsh and unconducive for effective teaching and learning.

Ajayi (2007) maintained that high level of academic performance of students cannot be guaranteed where instructional space such as classrooms, libraries, technical workshops and laboratories are structurally defective, not properly ventilated and not spacious enough for use. He further emphasized that structural effectiveness, proper ventilation and well-located instructional space may lead to successful teaching and learning process in Nigeria secondary schools.

In his view, Mark in Ajayi and Yusuf (2009), re-enforced the fact that one cannot expect high level students' academic performance where school buildings such as classrooms, libraries, technical workshops and laboratories are substandard. He emphasized that clean, quiet, safe, comfortable and healthy environment are important components of successful teaching and learning. In support, Uchendu et al. in Giami and Birabil (2019), pointed out that the general appearance of school facilities constitutes the basis upon which members of the public pass their judgement about academic going on in the school.

However, experience had revealed that students' academic performance can be traceable to many determinants, of which, the school environment is one of it. Reason being that, when students are been taught in a conducive environment, they tend to perform better than others taught in an environment unconducive for learning. Therefore, it become apt and expedient to investigate the influence of school environment on the academic performance of students in public senior secondary schools in Yenagoa Metropolis of Bayelsa State.

## **Purpose of the Study**

The purpose of the study is to investigate the influence of school environment on students' academic performance in public senior secondary schools in Yenagoa Metropolis of Bayelsa State. Specifically, the study sought to:

- Determine the influence of school physical facilities on academic performance of students in public senior secondary schools in Yenagoa Metropolis of Bayelsa State.
- Ascertain the influence of learning environment on academic performance of students in public senior secondary schools in Yenagoa Metropolis of Bayelsa State.

## **Research Questions**

The following research questions guided the study:

- What is the influence of school physical facilities on students' academic performance in public senior secondary schools in Yenagoa Metropolis of Bayelsa State?
- What is the influence of learning environment on students' academic performance in public senior secondary schools in Yenagoa Metropolis of Bayelsa State?

#### THEORETICAL FRAMEWORK

The Skinnerian environmental theory and Social learning theory by John Locke (1917) and Albert Bandura (1977) were adopted for the study. The Skinnerian environmental theory holds that experience and learning are basic and very essential to understanding human behavior. The environmental approaches conceive human behavior as something that is acquired through the process of interaction with the environment, rather than inherited. Skinner proposed that individual differences among students come from the fact that each student come from different environments in which their learning behavior has been shaped and reinforced in various ways. Therefore, what may be considered a positive reinforcer for one student (or group of students) may not promote positive learning behavior for others. This change in behaviour is the point at which learning occurs. Advanced student learning occurs through the shaping process, in which the teacher reinforces successive approximations in individual student behaviour towards the desired learning outcome. If teachers do not adjust their instruction to individual student needs, then the steps that the student makes towards the instructional goal cannot be reinforced; thus, shaping (and learning) cannot occur.

# **Concept of School Environment**

School environment refers to educational approach, cultural context or physical setting in which teaching and learning occurs. School environment encompasses the cultural setting of the school or classroom. These include conducting classes in relevant classroom, grouping of desks in specific ways, decorating the wall with learning materials, utilizing audio, visual and digital technology, learning style and physical setting in which teaching and learning takes place (Ibok, in Akpan, 2020). The environment exerts significant influence on students' academic performance. For example, when a school is sited in a noisy area like an airport, industrial area or in the heart of a city where business activities are very high, it disrupts effective teaching-learning. As such, one should not expect students in these areas to do very well academically. Noise in anything interferes with teaching/learning process (Mudassir et al., 2015).

However, the physical structure of the school building and the interactions between teachers and students can also influence students' performance. School climate can be a positive influence on the health of the learning environment or a significant barrier to learning. The school environment can affect many areas of the people within the school. For example, a positive school climate has been associated with fewer behavioural and emotional problem for students. Therefore, it is believed that positive interpersonal relationship and optimal learning opportunities for students in all demographic environments can increase achievement behavior. Positive student - teacher relationship brings about a positive and supportive climate for students for smooth running of academic activities which result in good academic performance (Orlu, 2013).

It is believed that school environment have considerable influences on the academic performance of students in both internal and external examinations like the WASC, NECO and JAMB. The not too good performance of students in these external examinations may be attributed to some extent the nature of the school environment, such as the physical facilities, learning environment among others. Ukashia (2010) asserted that given sound teachers in a sound learning environment, with learners learning in a conducive environment, it is expected that the academic achievement of the students would be above average.

According to Marcus (2010), the reason some students perform better than others in the same school. In their contribution, Ihuoma and Ebere (2022) stated that the environmental difference and the difference in the quality of instruction from one school to another, can as well create differences in the level of knowledge acquisition of the children. This implied therefore, that the learning facilities in the school will expose the children to socio-economic influence which can affect their academic performance. This was supported by Ololube (2011), which affirmed that school environment contributes to children academic performance which is usually measured in terms of cognitive, psychomotor and effective domain.

## **Concept of Academic Performance**

Academic performance refers to a students' performance in the various subjects taught in the school and which determines his/her status in the class. It outcome gives the students opportunity to develop their talents, improve their grades and prepare for future academic challenges. Bossaert et al. (2011), defined academic performance as students' success in meeting short or long term goals in education. In other words, it relates to academic subjects a student studied in school and the skills the student is expected to master in each (Moyle, 2010). In his view, Orim in Akpan (2020) opined that the academic performance of students to a large extent can also be tied to the teaching methodology adopted by the teachers and lack of fund from the government to provide quality books for the libraries and equipment for the laboratories. However, these might not be the only reasons why students perform abysmally in examinations.

# The Influence of School Physical Facilities on Academic Performance of Students

The importance of physical facilities cannot be divorced from academic performance. Students' academic performance is somewhat tied to the availability of facilities like laboratories, libraries, classrooms, convenience, playground among others that are put in place in all our schools, as the availability of these resources are indeed a plus to the teachers and it goes to enhance the level of ingenuity and commitment of the teachers toward effective instruction delivery. School facilities in many schools are outdated and dilapidated, which demotivate teachers and discourage effective teaching and learning due to the unconducive nature of the environment. The seeming reflection of the existing facilities in the schools, call for urgent need and proactive step towards the renovation of old buildings, chairs, desks, cabinets and acquisition of modern classrooms as these will in no small measure contribute immensely to the academic performance of students (Alimi et al., 2012; Kingdom-Aaron et al., 2021).

Koroye (2016) lamented that fact that school facilities in most secondary schools in Bayelsa State have not been in good shape. According to Mutiu and Ahmed in Koroye (2016), in some cases, students sit on the ground to receive lessons, also many of the classrooms, laboratories, libraries, playing grounds are in terrible state of despair. This shows that in most of the nation's secondary schools, teaching and learning take place under a most uncomfortable environment, lacking basic materials. Denga in Koroye (2016) opined that to achieve improved performance by the students, there should be conducive physical environment for students in the secondary school. According to him, unfortunately, some of the urban and rural schools lack adequate infrastructural facilities like classroom blocks as some of the students learn under shade of trees (especially the newly established ones). And where the classroom blocks exist, one discovers that most of their roofs are blown off by rain storms. While, other schools have pot-

holes in the greater portions of their classrooms begging for repairs and renovation. Worst still, a greater percentage of the students sit and write on the bare floor for insufficient classroom desks. This situation doubtless, cannot promote students learning ability and subsequently better performance in their class work including examinations. He therefore recommended that there was need for all hands to be on deck to make sure that these hindrances were removed so that a good solid foundation could be laid for future generation.

# The Influence of Learning Environment on Academic Performance of Students

Learning environment is a strong determinant to students' academic performance. Balog in Usman and Madudili (2019) identified the components of learning environment to include; people, teaching materials, technical tools, learning resources, curriculum, training, instruction, physical environment and learning space. The people are the individuals that affect the student directly or indirectly through connection or relationship which can contribute to students' growth and success in their career aspect. The teaching materials, technical tools, and learning resources are the teaching materials, highly advanced tools or other instructional resources that aligned with the curriculum as a part of student learning support.

Ajao in Amaechina and Ezeh (2019) 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. In a surveys and interviews carried out, it revealed that teachers felt they were better able to differentiate instructional lessons to accommodate instructional facilities and essential instruments that facilitate teaching and learning in classroom environment. Adding that, the availability and optimal utilization of instructional materials encourage quality learning by the students in the classroom. Teachers' ability in applying instruction materials effectively during instruction create greater understanding among the students. In other words, lack of instructional facilities or inadequate use of instructional facilities in classroom environment may likely affect the academic performance of students negatively. This confirm the views of Afolabi in Aneke and Akpusugh (2022), that students with a good learning environment background performed better than their counterparts with poor learning environment background.

Peer groups are also component in the learning environment that influences the behavior of their members. This is the association of people within the same age grade. Moyle (2010), defined peer group as a group of individuals usually well known to each other and of the same age sharing similar social experiences and values. To this end, peer group relationship may likely affect the academic performance of students. According the Ololube (2011), students interacting freely with peers who have positive self-concept toward every subject taught in school will lead to higher academic achievement, while those who interact with peers who have negative self-concept toward subjects taught will lead to poor academic achievement.

## **METHODOLOGY**

This study adopts descriptive survey research design. The population of the study comprised all the seventeen (17) public senior secondary schools in Yenagoa Metropolis of Bayelsa State. The respondents consist of nine hundred and fourteen (914) teachers in public senior secondary schools in Yenagoa Local Government Area of Bayelsa State. The sample of the study comprised 99 teachers. This represents 10% of the population. A structured questionnaire titled

"Influence of School Environment on Students' Academic Performance (ISESAP)." The instrument was validated and yielded a reliability coefficient at 0.78. The researcher with the help of a trained research assistant distributed all the ninety-nine (99) copies of the questionnaire to the respondents. At the end of the exercise, only eighty-seven (87) copies of questionnaire were retrieved. This represented 88% retrieval rate. Mean and standard deviation were the statistical tools used in answering the research questions. Mean scores above 2.5 was acceptable while mean scores below 2.5 was rejected as not influencing.

### **RESULTS**

**Research Question 1:** To determine how school physical facilities influence students' academic performance in public senior secondary schools in Yenagoa Metropolis of Bayelsa State?

Table 1: Mean and standard deviation rating of teachers' opinion on how school physical facilities influence students' academic performance in public senior secondary schools in Yenagoa Metropolis of Bayelsa State

S/N	Items	Teachers (N = 87)		Remark
		Mean	Std. Dev.	-
1.	Students do better when there adequate classrooms for teaching and learning.	3.28	1.04	Agree
2.	Adequate desks for the students to seat on during instruction enhanced their academic performance.	3.16	.71	Agree
3.	The library is well-equipped with relevant books and it helped students' to do well academically.	2.58	.86	Agree
4.	Students' perform well in sciences because the laboratory is well- equip for practical.	3.36	1.05	Agree
5.	Students do well academically in a neat environment.	3.12	1.02	Agree
6.	Students' understanding are enhance during instruction in a well-ventilated classrooms.	2.71	.71	Agree
7.	Students perform better academically when the class size is moderate for effective instruction and less distractions.	3.02	1.01	Agree
8.	The playground is spacious and conducive for students' activities, which aid them to do better academically.	2.98	.99	Agree
9.	The parameter fence discourages students' truancy and enhances their learning during school period.	3.12	1.02	Agree
10.	Students do better academically if there is conducive convenience for students when they are pressed.	2.77	.71	Agree
	Mean and Standard Deviation	3.01	.91	Agree

Table 1 show a mean score 3.01 which is above the criterion mean of 2.50. This therefore, revealed that school physical facilities influence students' academic performance to a high extent in public senior secondary schools in Yenagoa Metropolis of Bayelsa State.

**Research Question 2:** To determine how learning environment influence students' academic performance in public senior secondary schools in Yenagoa Metropolis of Bayelsa State?

Table 2: Mean and Standard Deviation rating of teacher's opinion on how learning environment influence students' academic performance in public senior secondary schools in Yenagoa Metropolis of Bayelsa State

S/N	Items	Teachers $(N = 87)$		Remark
		Mean	Std. Dev.	
1	Students perform well academically when taught by qualified teachers.	2.58	.79	Agree
2.	Students perform better academically in a moderate class size.	2.64	.88	Agree
3.	Students' academic perform is enhance when there is adequate instructional materials for their teachers to use during instruction.	2.59	.83	Agree
4.	The enforcement of disciplinary measures motivate students to do well academically.	2.63	.88	Agree
5.	Student do well academically in an environment conducive for teaching and learning.	3.43	1.09	Agree
6.	Students excel academically in a serene environment.	2.82	1.37	Agree
7.	Robust teacher-student relationship motivate students to do well academically.	3.12	1.02	Agree
8.	Students' active participation during instruction improved their academic performance.	3.08	.99	Agree
9.	Teachers' commitment to their duties improve students' academic performance.	3.11	1.02	Agree
10.	Students who make use of the school library perform better academically.	3.32	1.05	Agree
	Mean and Standard Deviation	2.93	.99	Agree

The mean score on table 2 is 2.93. This score exceed the criterion mean of 2.50, which means learning environment influences students' academic performance to a high extent in public senior secondary schools in Yenagoa Metropolis of Bayelsa State.

## **DISCUSSION**

The result of the findings on table 1 shows that, school facilities influence students' academic performance in public secondary schools in Yenagoa to a high extent. This corroborate the views of Ajayi (2007), when he maintained that high level of academic performance of students cannot be guaranteed where instructional space such as classrooms, libraries, technical workshops and laboratories are structurally defective, not properly ventilated and not spacious enough for use. He further emphasized that structural effectiveness, proper ventilation and well-located instructional space may lead to successful teaching and learning process in Nigeria secondary schools.

The result of the findings on table 2 shows that, learning environment influence students' academic performance in public secondary schools in Yenagoa to a high extent. This corroborate the opinion of Ajao in Amaechina and Ezeh (2019), which posited 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. This was in tandem with the views of Afolabi in Aneke and Akpusugh (2022) who found out in his study that students with a good learning environment background performed better than their counterparts with poor learning environment background.

#### **CONCLUSION**

Based on the findings, it was revealed that school environment does influence students' academic performance in public senior secondary schools in Yenagoa local government area of Bayelsa State to a high extent. This notwithstanding, there is still need for more attention from the government and stakeholders to improve on quality training and retraining of teachers, providing adequate facilities and equipment, and security measures to achieve safe school environment that would promote an environment conducive for effective teaching and learning outcome for optimal students' academic performance.

#### Recommendations

Based on the findings and conclusion, the following recommendation were made:

- Government should increase budgetary allocation to education that would help cater for the shortfalls in school facilities among others to make the school environment conducive for effective teaching and learning process.
- The Ministry of Education should more desks for students to seat on comfortably during class instruction, fully equip the libraries with relevant and modern books and provide adequate and modern laboratory equipment for students practical;
- The Ministry of Education should make it mandatory that no school administrator admit more than the required number of students per class as recommended in the National Policy on Education;
- The Ministry of Education should periodically especially at the beginning of a new session organize seminars, workshops and training for teachers to update their knowledge and capacity to deliver on their job performance; and
- Government should introduce security measures that would guarantee relative safety and peace in the school environment across the Local Government Area.

### REFERENCES

- Adele, O. A. (2015). Availability of basic technical learning materials in biology in selected secondary schools in Lagos State. *Proceedings of the Annual Conference of Science Teachers' Association*, 41, 263-266.
- Ajayi, I. A. (2007). Issues in school management. Lagos: Bolabay Publications.
- Ajayi, I. A., & Yusuf, M. A. (2009). Instructional space planning and students' academic performance in South West Nigeria secondary schools. *International Journal of Education & Science*, 1(2), 73-77.
- Akomolafe, C. O., & Adesua, V. O. (2016). The impact of physical facilities on students' level of motivation and academic performance in senior secondary schools in South West, Nigeria. *Journal of Education Practice*, 7(4), 38-42.
- Akpan, I. F. (2020). The influence of school environment on academic performance of biology students in secondary schools in Ukanafun Local Government Area, Akwa-Ibom State.
- Alimi, O. S., Ehinola, G. B. & Alabi, F. O. (2012). School types, facilities and academic performance of students in senior secondary schools in Ondo state, Nigeria. *International Education Studies*, 5(3), 44-48.

- Amaechina, U. O., & Ezeh, S. C. (2019). School environment and academic performance of secondary school students in Enugu Education Zone. *BSUJEM*, 1(2), 124-131.
- Aneke, J. C., & Akpusugh, R. A. (2022). Influence of learning environment on the academic performance of secondary school students in Makurdi Metropolis. *Science Open, 1-14*
- Arul, A. S. (2012). School environment and academic achievement of standard ix students. Journal of Educational Instructional Studies in the World, 2(3), 210-211.
- Bossaert, G., Doumen, S. E., & Buyse, K. V. (2011). Predicting students' academic achievement after the transition to first grade: A two-year longitudinal study. *Journal of Applied Development Psychology*, 32(3), 47-57.
- Edo, B. L., Opuaji, M., Osheilu, K. I., & Okeke, N. L. (2018). School environment and academic achievement of students in secondary schools in Rivers State. *International Journal of Innovative Education Research*, 6(2), 68-75.
- Fayose, P. O. (2016). *School library resource centers for educational excellence*. Ibadan: AENL Educational Publishers.
- Giami, C. B. N., & Birabil, S. T. (2019). Perceived influence of socio-political considerations in the provision of educational facilities in secondary schools in Rivers State, Nigeria. *International Journal of Innovative Psychology & Social Development*, 7(2), 105-113.
- Ihuoma, C. P., & Ebere, A. A. (2022). Environmental variables and students' quality learning outcomes in public secondary schools in Rivers State, Nigeria. *Jurnal Penyelidikan Pendidikan*, 40, 52-62.
- Kingdom-Aaron, G. I., Etokeren, I. S., & Omeodu, M. D (2021). Relationship between classroom environment and students' academic performance in senior secondary school biology in Rivers State.

  https://www.researchgate.net/publication/350707424\_Relationship\_between\_Classroom\_Environment\_and\_Students'\_Academic\_Performance\_in\_Senior\_Secondary\_School\_Biology\_in\_Rivers\_State.
- Koroye, T. (2016). The influence of school physical environment on secondary school, students' academic performance in Bayelsa State. *African Journal of Educational Research*, 2(4), 1-5.
- Marcus, O. U. (2010). *Environmental variable and students' reading habits in secondary schools*. Unpublished M.Ed. Thesis, University of Calabar.
- Mgbodile, T. O. (2014). Fundamentals in educational administration. Enugu: Magnet Business Enterprise.
- Moyle, K. (2010). *Building innovation: learning with technologies*. Australian Council for Educational Research.
- Mudassir, I. U., & Norsuhaily, A. B. (2015). The influence of school environment on academic performance of secondary school students in Kuala Terengganu, Malaysia. *The American Journal of Innovative Research and Applied Sciences*, 1(6), 203-209.
- Murugan, A., & Rajoo, L. (2013). Students' perception of Mathematics classroom environment & Mathematics achievement: A study of Sipitang, Sabah, Malaysia: *Proceeding of the International Conference on Social Sciences Research*, 4-5 June.
- Narad, A., & Abdullah, B. (2016). Academic performance of senior secondary school students: Influence of parental encouragement and school environment. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 8(2), 12-19.

- Nwizu, B. O. (2013). Environmental influence on academic performance of secondary school students in Port Harcourt Local Government Area of Rivers State. *Journal of Economics and Sustainable Development*, 3(2), 14-19.
- Okoro, C. N. (2014). School environment and teacher competency variable as correlates of learning outcomes of integrated science students with hearing impairment. Unpublished Ph.D. Thesis, University of Ibadan.
- Okwelle, P. C. (2016). *Instructional strategies for technology education teacher*. Unpublished Monograph. Faculty of Technical and Science Education, RSU, Port Harcourt.
- Ololube, N. P. (2011). Professionalism, school effectiveness and quality improvement: potentials and issues surrounding school effectiveness. Lambert Academic Publishers.
- Orlu, C. (2013). Environmental influence on the academic performance of secondary school students in Port Harcourt local government area of Rivers State. *Journal of Economic and Sustainable development*, 4(13), 34-38.
- Puyate, S. T. (2016). *Facilities planning in industrial education*. Unpublished Monograph. Faculty of Technical Education and Science. RSU, Port Harcourt.
- Thomas, C. G., & Amaechi, O. J. (2019). Influence of school environment on students' academic performance in technical colleges in Rivers State. *International Journal of New Technology and Research*, 5(3), 40-48.
- Ukashia, J. O. (2010). *Classroom learning environment and students' attitude to learning*. Unpublihed M.Ed. Thesis, University of Calabar.
- Usman, Y. D., & Madudili, C. G. (2019). Evaluation of the effect of learning environment on student's academic performance in Nigeria. https://files.eric.ed.gov/fulltext/ED602386.pdf.
- Von-Stumm, S., Hell, T., & Chamorro-Premuzic, T. (2011). The hungry mind: Intellectual curiosity is the third pillar of academic performance. *Perspective on Psychological Science*, 6(6), 574-588.