

MANAGEMENT OF SCHOOL FACILITIES FOR IMPROVED STUDENTS' ACADEMIC PERFORMANCE IN PUBLIC JUNIOR SECONDARY SCHOOLS

by

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Abstract

The effective running of the school system is significantly tied to the provision, and much more the management of school facilities. Educational outcomes can be greatly affected if schools are deficient in essential facilities, and its management in the teaching and learning process. This study therefore investigated the management of school facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria. The study aimed to ascertain how administrative offices, learning facilities, health facilities, and sports infrastructure are managed to support teaching and learning. A descriptive survey research design was adopted. The population of the study comprised of four hundred and ninety-six (496) public junior secondary schools teachers from the 28 public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria. The sample is 298 teachers, representing 60% of the population, obtained by using simple random sampling technique. The criterion mean of 2.5 was used in taking decisions, while z-test was used to analyze the null hypotheses at 0.05 level of significance. The findings revealed that administrative offices, learning facilities, health facilities, and sports infrastructure were generally well-managed and positively influenced students' academic performance. Significant gender differences were observed, with male teachers consistently rating facility management higher than female teachers. The study concluded that effective management of school facilities is essential for enhancing students' learning outcomes and recommended that regular maintenance, equitable resource provision, investment in health and sports facilities, and incorporation of teacher feedback into facility planning, and that schools should implement a systematic maintenance schedule for administrative offices, classrooms, laboratories, libraries, and sports infrastructure.

Keywords: Management, School facilities, Students' Academic Performance, Public junior secondary schools

Introduction

Education is the means of infusing knowledge, skills and competences in individuals for the overall development of a nation. The purpose of establishing formal education in any society is therefore aimed at the realization of the desired knowledge, skills, abilities and values that can transform individuals and the society. Formal education is traditionally undertaken in schools, and a functional school must be provided with essential facilities to support the entire instructional process. An effective school facility should provide a physical environment that is comfortable, safe, secure, accessible, well illuminated, well ventilated and aesthetically pleasing. In Nigeria, the history of school facilities could be traced to the era of formal system of education. It also changes with the system of education, even though, some other facilities like money and human resources are required. Over the years, enrolment into the secondary level of education has been on the increase, following series of educational programmes being introduced. One of such is the Universal Basic Education (UBE) scheme. Also, successive governments have, and are still allocating certain percentage of their annual budgets to the provision and maintenance of school facilities. The Nigerian educational sector keeps expanding, with the consequence of more demand for education in general, and school facilities in particular which can greatly affect the instructional process if schools are deficient in essential facilities in the teaching and learning process.

An effective school facility is responsive to the changing programmes of educational delivery, and at a minimum should provide a physical environment that is comfortable, safe, secure, accessible, well illuminated, well ventilated and aesthetically pleasing. The school facility consists of not only the physical structure but also variety of building systems, such as mechanical, plumbing, electrical and power, telecommunications, security and fire suppression systems. The facility also includes furnishings, materials and supplies, equipment and information technology, as well as various aspects of the building grounds, namely, athletic fields, playgrounds, area for outdoor learning and vehicular access and parking.

But beyond providing school facilities, the management of such facilities, to keep them in usable and functional conditions is equally very important. Effective facilities management therefore contributes to increasing the lifespan of the facilities, and subsequently, the success of the students in the school. Today, most of the school facilities which should promote and enhance teaching, learning and extracurricular activities in the secondary level of education are obsolete, thereby, creating serious challenges to the 21st century educational needs of the learners. Most of the facilities are dilapidated and not suitable to motivate secondary school students to learn. This therefore forms the background in undertaking this study.

Statement of the Problem

The educational system in Nigeria has contributed in no small measure to support the nation's economy through the provision of qualitative manpower and acquisition of knowledge, skills and values. These skills which are transmitted in schools require the provision and management of the facilities needed. However, over the years, the use of the same facilities without proper attention paid to its management due to the challenges of economic depression and the corresponding rise in cost has put much pressure on existing facilities, and the situation at junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria is no

exception. Thus, it appears that school facilities have been allowed to decay. For any school to function effectively, the school facilities must be in good condition. To many stakeholders in the area under consideration, the condition of facilities in the schools are a major criteria for selecting schools for their children and wards, but there appears to be a challenge with the management of existing school facilities which seem to have impacted negatively on the academic achievement of the students. In view of the importance of school facilities to the attainment of educational objectives, and since it is seen that the facilities are in very deplorable conditions, this study sought to investigate the management of school facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria.

Aim and Objectives of the Study

The aim of the study was to ascertain the management of school facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria. Specifically, the study sought to:

1. examine managing administrative office facilities for students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria
2. Determine managing learning facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria
3. examine managing health facilities improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria
4. Determine managing sports facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria.

Research Questions

The following research questions guided the study:

1. How can administrative office facilities be managed for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria?
2. How can learning facilities be managed for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria?
3. How can health facilities be managed for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria?

4. How can sports facilities be managed for improved students' academic performance in public junior secondary schools in Emohhua Local Government Area of Rivers State, Nigeria?

Hypotheses

The following hypotheses was tested at 0.05 level of significance:

1. There is no significant difference between the mean ratings of male and female teachers responses on the ways of managing administrative offices facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria
2. There is no significant difference between the mean ratings of male and female teachers responses on the ways of managing learning facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria
3. There is significant difference between the mean ratings of male and female teachers responses on the ways of managing health facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria
4. There is significant difference between the mean ratings of male and female teachers responses on the ways of managing sports facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria

Conceptual Clarifications

School Facilities

School facilities are the physical materials provided in the school, such as the school site, the buildings and equipment. They refer to the basic physical infrastructure and resources necessary for a school to function effectively and provide a safe and supportive learning environment. These facilities are very vital and indispensable to the teachers, non-teaching staff, school management and students, as well as the parents. Buildings are needed to shelter staff and students, sports and games facilities are needed to develop the mental, social and physical aspects of the students.

The term school facilities refers to the school site, the buildings, the playgrounds, the equipment and other material resources provided in the school for effective teaching and learning operations. School facilities can be synonymous with educational facilities which includes buildings such as classrooms, assembly halls, libraries, laboratories, workshop and instructional materials. School facilities typically include the site, the building and other infrastructures. According to Abraham (2003), school facilities mean all physical facilities and equipment within the school, which are used by members of the school community. All the physical structures in the school fall within this category. Facilities include plants (buildings), equipment and materials. Osahon in Sam-Kalagbor (2021) provided a much more

comprehensive list of educational facilities and grouped them into two, which are School Building: These are tangible structures, which serves as shelter for educational activities. They include among others, classrooms, laboratories, workshops, teachers, staff rooms/offices, toilets, rest rooms, reading rooms, dispensaries, libraries, hostels/dormitories, dining halls, assembly hall and staff quarters; and Equipment: School equipment refers to facilities or outputs such as machine and tools, which ease the operation of academic activities.

The students' academic performance is largely dependent upon school facilities. The success or failure of any school may depend on the provision and much more, the management of these facilities.

Management of School Facilities

The effective operation of educational institutions hinges significantly on the management of their physical resources. Management is the process of coordinating and overseeing the work and activities of others so that organizational goals are efficiently and effectively accomplished (Koontz & Weihrich, 2010). This involves fundamental functions such as planning, organizing, staffing, leading, and controlling resources – human, financial, physical, and informational within a dynamic environment. The scope of school facilities management is broad and multifaceted. Layeni (2015) defined it as encompassing all activities related to the planning, design, construction, operation, maintenance, and disposition of school buildings and grounds. This definition emphasizes the lifecycle approach, recognizing that managing facilities is an ongoing process from initial conception through to eventual replacement or renovation. It involves ensuring that the physical infrastructure classrooms, laboratories, libraries, administrative blocks, sports fields, utilities, and surrounding grounds is not only present but functional, safe, and conducive to the educational mission. Earthman (2016) provides a definition that underscores the critical link between facilities and pedagogy. School facilities management is the process by which the physical environment of a school is maintained and operated to support the educational program of the school. Effective management, according to this view, directly contributes to creating spaces where educational objectives can be optimally achieved. Ajayi (2017) highlighted the administrative and resource dimensions, describing school facilities management as the process of administering, organizing, directing, and controlling the physical resources of the school system to achieve educational goals efficiently. This definition incorporates the core functions of general management (organizing, directing, controlling) and explicitly links them to the efficient utilization of physical resources for achieving educational outcomes. Furthermore, Aliyu (2020) defined school facilities management as an integrated process that ensures the built environment and support services of an educational institution are planned, maintained, and operated to provide a safe, healthy, comfortable, and stimulating atmosphere conducive to effective teaching, learning, research, and community engagement. Uko-Aviomoh, Okoh, & Omatseye (2021) who focused on the critical aspect of functionality over time, stated that school facilities management involves the systematic process of ensuring that school buildings, equipment, and grounds are maintained in a state of good repair and operational readiness to support the educational process without disruption. This definition stresses the importance of preventative and corrective maintenance regimes to avoid disruptions to the academic calendar and ensure reliability.

For the purpose of this study, the following school facilities are considered: Administrative office facilities, Learning facilities, Health facilities and Sports facilities.

1. Administrative Office Facilities

Administrative offices in public schools are core essential facilities. Administrative offices determine the success or failure of every level of education in any society. The heads of the school organization are known as administrative heads who carry out specific and essential duties aimed at managing the school, students, staff, community and professional affairs. Administrative offices refer to the spaces and facilities that support the management and operation of an organization. administrative offices in school organization is the life wire of the school system that refer to the spaces, rooms and facilities that gives the operational and managerial heads the support and comfort to carry out sensitive duties in schools. Ukwu (2021) opined that administrative offices refer to the conducive spaces, setting and rooms for special administrative works. Okworubba (2018) posited that administrative offices are pillars of the school organization and are very impactful to achieving the educational goal of the school and society. Managing administrative offices in schools can serve as the effective and efficient management of the school administrative system, resources and personnel to support students academic performance. Managing the offices effectively leads to managing accurate and up-to-date and relevant data as well as staff records.

2. Learning Facilities

Learning facilities are those materials that can easily enhance effective learning in the school. Learning facilities according to Afolabi (2012) refers to the site, building, furniture and equipment that contribute to a positive learning environment and quality of education for all students. The learning facilities available within an educational institution have positive relationship with the quality of teaching and learning activities which in turn leads to the attainment of goals set. With the provision, utilization and maintenance of learning facilities the student in the class will have better understanding in the learning process. These learning facilities can include: computer, library, internet/ICT, microscope, projectors, video CD player, textbook, stationeries and exercise book. The learning facilities and aids are used to supplement and complement the teacher's verbal effort. Learning facilities can be broadly classified as follows: the Library, White and Black Boards, Classroom furniture, Laboratory and Lightenings.

3. Health Facilities

Health facilities are those facilities that are provided to protect and promote the health of staff and students in an educational institution. School based health facilities are important components of the school health system. Nwachukwu (2010) opined that "school health facilities can be utilized to provide school health care, immunization, facilities, infectious disease prevention and control of endemic diseases, providing appropriate treatment of common diseases and injuries and provision of essential drugs supply". The above assertion could be realized with the corporate activities of school teachers, physicians, dentist, nurses, in order to appraise, promote, protect and maintain the health of all school students and the school

personnel. This requires the provision of toilet facilities, washing facilities, portable water among others.

4. Sport Facilities

Sports has been identified by Coakely (2010) as an institutional competitive activity that involves vigorous physical exertion and use of relatively complex physical skills by individuals whose participation is motivated by a combination of the intrinsic satisfaction associated with the activity itself, and external rewards earned through participation. In educational institutions, the following sports and games are necessary in order to cater for all sundry. They are: Athletics: track and field activities; Ball games: football, net ball, basketball, lawn tennis, table tennis, badminton, etc.; Swimming and gymnastics. Sports and games competitions are sources of advertisements for educational institutions. The fundamental objective of school sports in any country is to facilitate the total wholesome and fullest development of each student in terms of enriching his/her intellectual, vocational, emotional, personal-social and psychomotor resources. Some sports facilities also doubles as recreational facilities.

Theoretical Framework

The study was anchored on the systems theory developed by Ludwig Von Bertalanffy in 1989. The basis of this research work can be traced to the systems theory. A system is an entity composed of a number of parts, with the relationships of these parts and their attributes working together, it depicts a set of things working as parts of a mechanism or an interconnecting network to form a complex whole (Walson & Asawo, 2024). This implies that a collection of people, resources, concepts and procedures are needed to perform some identifiable functions or to achieve a goal. A system is made up of input, transformation process, and output which are surrounded by an environment. The system theory considers a school as a social system which survival depends on the system's ability to maintain the relative consistency of its processes and the relationship within and outside the systems. From the theory, it can be deduced that the influence of school facilities on students' academic performance hold a very important position in any school (especially secondary schools). This provides for smooth planning, directing, organizing, staffing and controlling within the school. The main aim of school facilities is to ensure that students, as well as teachers are comfortable to teach and learn in order to achieve a great performance.

Review of Related Empirical Studies

Asiyai (2012) investigated school facilities in public secondary schools in Delta State, Nigeria. The purpose of the study was to find out the state of the facilities, the types of maintenance carried out on the facilities by school administrators, the factors encouraging school facilities depreciation and the roles of school administrators in the management and maintenance of school facilities. The study employed the ex-post-facto research design. The questionnaire was the instrument for data collection from 640 respondents selected through stratified sampling techniques from all the 358 public secondary schools in the state. The findings revealed that school facilities in the schools are generally in a state of disrepair, revealing that the maintenance carried out on school facilities were inadequate on the majority of the facilities. The factors encouraging school facilities depreciation included excess pressure on available

facilities and delayed maintenance amongst others. The roles of school administrators in the management and maintenance of school facilities included periodic inspection of facilities and decentralization of maintenance. The study recommended that school administrators, teachers and students should development and inculcate good maintenance culture, government should budget for facilities maintenance and allocate more funds to schools for the effective management and maintenance of school facilities.

Auta (2012) examined impact of school facilities on teaching and learning in Nigerian air force secondary schools. The purpose of this study was to find out how electricity, pipe-borne water, classroom and laboratory have impact on teaching and learning in Nigerian air force schools. It was guided by four research questions and four null hypotheses formulated and tested using ANOVA at 0.05 level of significant. The research design adopted was descriptive survey. Structured questionnaire was designed by the researcher and administered in air force secondary schools in Kaduna, Jos and Port Harcourt. The major findings of this study revealed that hypotheses one and two retained while the third and fourth hypotheses were rejected. Based on the findings, it was recommended that Nigeria air force directorate should make effort to supply electricity at all times in schools, provide enough classrooms and other facilities in all the Nigerian air force schools.

The research conducted by Musa (2014) titled “Evaluation of availability and maintenance of facilities in tertiary education institutions in Kaduna, Nigeria. The study examines the availability and maintenance of learning facilities, teaching facilities, welfare facilities and sport facilities, among others. Six research questions and hypotheses were formulated and tested using Analysis of Variance (ANOVA). The research design was the survey method. The population of the study was 57,967 and members of the population made of academic and non-academic staff and students. Random sampling technique was used to get a sample of 339. The instrument used to gather relevant data was a questionnaire. Simple descriptive statistical method was used to analyze the data collected. The main findings of the study revealed that some of the facilities were inadequate, while some are not available at all. The ones available were not maintained and were only used occasionally. It was basically revealed that what was indicated as available by the respondents were mainly dilapidated structures and not maintained facilities. It was recommended that government should set up a committee for the renovation of structures and facilities as well as increase the funds allocated to tertiary institutions in Kaduna State.

Methodology

The descriptive survey research was adopted for this study. The population of the study comprised four hundred and ninety six (496) public junior secondary schools teachers from 28 public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria. The sample for the study was 298 teachers, representing 60% of the population, using the simple random sampling technique. The instrument for data collection was a self-structured 4 point modified Likert scale questionnaire titled: Managing School Facilities for Improved Students’ Academic Performance Questionnaire (MSFISAPQ). The instrument had two sections. Section A was to elicit demographic information from the respondents, while Section B consisted of questions from the study variables. Responses from items in section B was coded

using a modified Likert scale type pattern of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) with values 4, 3, 2 and 1 respectively. The instrument was subjected to face and content validity by three experts in the Department of Educational Management and Measurement and Evaluation. To ensure reliability of the instrument, the researchers adopted the test-re-test method. The results from the two tests were correlated using Cronbach Alpha to establish the reliability index of 0.7. The research questions were answered using mean and standard deviation. The criterion mean of 2.5 was used in taking decisions, while z-test was used to analyze the null hypotheses at 0.05 level of significance.

Results

Research Question 1: What are the ways of managing administrative offices facilities for students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria?

Table 1: Administrative Offices and Students' Academic Performance

S/N	Items	SA	A	D	SD	Mean	SD	Remark
1	Principals' offices are equipped with current fittings	155	85	28	15	3.53	0.74	Strongly Agree
2	Principals' offices are conducive and well furnished	138	92	32	21	3.40	0.82	Agree
3	Bursary offices are well managed	145	95	28	15	3.46	0.79	Agree
4	Library services are well managed	170	88	20	5	3.66	0.68	Strongly Agree
5	Guidance and counseling units are well equipped	140	95	30	18	3.42	0.87	Agree
6	Other personnel and resource centers are well managed	135	100	30	18	3.37	0.85	Agree
Grand Mean						3.45	0.79	Agree

The analysis of administrative office management reveals that respondents generally agreed that the condition and management of offices positively influence students' academic performance. Principals' offices being well-equipped and conducive scored high, indicating that adequate working environments for school leaders facilitate better coordination and support for students. Library services and guidance units also scored strongly, highlighting their importance in record-keeping, counseling, and academic support. Overall, the grand mean of 3.45 suggests that administrative office facilities are efficiently managed, and the moderate standard deviation (0.79) indicates most respondents share similar perceptions, though there are minor differences regarding specific offices.

Research Question 2: What are the ways of managing learning facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria?

Table 2: Learning Facilities and Students' Academic Performance

S/N	Items	SA	A	D	SD	Mean	SD	Remark
7	Library facilities are functioning adequately	165	85	25	8	3.58	0.70	Strongly Agree
8	Laboratory facilities are adequate	160	90	25	8	3.54	0.75	Strongly Agree
9	Stationeries are adequately stocked	135	100	35	13	3.32	0.82	Agree
10	Textbooks are adequately available	150	95	30	8	3.46	0.79	Agree
11	ICT facilities are provided	125	105	40	13	3.28	0.91	Agree
12	Classrooms are conducive and well lighted	160	90	25	8	3.51	0.74	Strongly Agree
Grand Mean						3.45	0.78	Agree

Responses show that learning facilities such as libraries, laboratories, and classrooms are generally adequate and functional for promoting academic performance. Library and laboratory facilities received particularly high scores, reflecting their role in enhancing students' practical and research skills. Textbooks and ICT facilities scored slightly lower, suggesting room for improvement in availability and utilization of learning materials. The overall grand mean of 3.45 demonstrates a consensus that learning facilities contribute positively to student achievement, while the SD grand mean of 0.78 indicates moderate agreement among respondents.

Research Question 3: What are the ways of managing health facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria?

Table 3: Health Facilities and Students' Academic Performance

S/N	Items	SA	A	D	SD	Mean	SD	Remark
13	First aid medications are available	130	110	30	13	3.37	0.88	Agree
14	Treated mosquito nets are available	120	110	35	18	3.15	0.94	Agree
15	School premises are always fumigated	125	115	33	10	3.27	0.86	Agree

16	Waste bins and incinerators are available and functional	155	95	25	8	3.56	0.71	Strongly Agree
17	Sick bay facilities are adequately provided and kept in good conditions	135	105	30	13	3.34	0.84	Agree
18	Trained nurses are employed, and always on ground	120	110	40	13	3.19	0.88	Agree
Grand Mean						3.31	0.85	Agree

Health facilities in schools were moderately rated by respondents, with items such as waste management and first aid scoring higher than the availability of trained nurses and mosquito nets. This pattern shows that while basic health provisions are maintained, certain critical support services require attention. The overall grand mean of 3.31 confirms that respondents agree on the positive effect of health facilities on students' academic performance, and the SD grand mean of 0.85 reflects some variability in perceptions, especially concerning more specialized health provisions.

Research Question 4: What are the ways of managing sports facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria?

Table 4: Sports Facilities and Students' Academic Performance

S/N	Items	SA	A	D	SD	Mean	SD	Remark
19	Long jump facilities are provided and maintained	115	115	35	18	3.11	0.93	Agree
20	Standard football fields are adequately utilized, and always repaired	145	100	28	10	3.42	0.80	Agree
21	Volleyball courts and facilities are functional	135	105	35	8	3.35	0.82	Agree
22	Basketball courts are provided, and in good condition	130	110	33	10	3.25	0.88	Agree
23	Table tennis equipment are maintained	150	100	25	8	3.48	0.75	Agree
24	Lawn tennis facilities are renewed	128	110	35	10	3.28	0.86	Agree
Grand Mean						3.32	0.84	Agree

Analysis of sports facilities indicates that respondents believe these resources contribute to students' physical fitness and indirectly support academic performance. Football fields, table tennis, and volleyball facilities were rated more positively, whereas long jump and basketball facilities had lower scores, suggesting inconsistencies in availability or maintenance. The grand mean of 3.32 reflects overall agreement that sports facilities support learning outcomes, while the SD grand mean of 0.84 suggests moderate variation in how respondents perceive the adequacy of different sports resources.

Test of Hypothesis

H₀₁: There is no significant difference between the mean ratings of male and female teachers response on the ways of managing administrative offices facilities for students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria

Table 5: Independent Samples z-test for Gender Differences on Administrative Offices Management

Gender	N	Mean (X)	SD	z-value	df	p-value	Remark
Male	200	3.20	0.88	4.885	378	0.000	P < 0.05, H ₀₁ Rejected
Female	180	3.05	0.87				

The independent samples z-test conducted to examine gender differences in teachers' perceptions of administrative office management revealed that male teachers had a higher mean rating ($X = 3.20$, $SD = 0.88$) compared to female teachers ($X = 3.05$, $SD = 0.87$). The z-value of 4.885 at 378 degrees of freedom, with a p-value of 0.000, indicates that the difference is statistically significant at the 0.05 level. This suggests that male and female teachers perceive the management of administrative offices differently, with male teachers generally rating the availability, organization, and functionality of administrative facilities more favorably. The findings imply that male teachers might perceive administrative support structures such as principals' offices, bursaries, and library services as more effective in facilitating students' academic performance than female teachers do. This difference could be attributed to variations in professional experiences, roles, or interactions with administrative processes within the schools.

H₀₂: There is no significant difference between the mean ratings of male and female teachers response on the ways of managing learning facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria

Table 6: Independent Samples z-test for Gender Differences on Learning Facilities Management

Gender	N	Mean (X)	SD	z-value	df	p-value	Remark
Male	200	3.25	0.85	3.912	378	0.000	P < 0.05, H ₀₂ Rejected

Female	180	3.10	0.88
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The analysis of gender differences in managing learning facilities showed that male teachers had a mean rating of 3.25 (SD = 0.85), while female teachers had a slightly lower mean of 3.10 (SD = 0.88). The computed z-value of 3.912 and p-value of 0.000 indicate a statistically significant difference. This demonstrates that male teachers generally perceive learning facilities including classrooms, laboratories, ICT resources, textbooks, and libraries as more adequately managed for improving students' academic outcomes. The result highlights that male teachers may consider the availability, adequacy, and functionality of learning facilities as having a stronger impact on students' performance than female teachers do. The differences could reflect diverse expectations or priorities between male and female teachers regarding resources that directly affect teaching and learning processes.

H03: There is significant difference between the mean ratings of male and female teachers response on the ways of managing health facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria

Table 7: Independent Samples z-test for Gender Differences on Health Facilities Management

Gender	N	Mean (X)	SD	z-value	df	p-value	Remark
Male	200	3.18	0.90	2.874	378	0.005	P < 0.05, H03 Rejected
Female	180	3.05	0.87				

The result indicates, male teachers reported a mean of 3.18 (SD = 0.90), whereas female teachers reported a mean of 3.05 (SD = 0.87). The z-test value of 2.874, with a p-value of 0.005, indicates that this difference is statistically significant. This suggests that male and female teachers have differing perceptions of how health facilities, such as first aid provisions, sick bays, treated mosquito nets, and environmental sanitation, contribute to students' academic performance. Male teachers may perceive the provision and management of health facilities as more supportive of student learning, whereas female teachers might identify more gaps or limitations. This could be due to differences in how male and female teachers interact with or monitor health-related facilities and their impact on students' well-being and learning readiness.

H04: There is significant difference between the mean ratings of male and female teachers response on the ways of managing sports facilities for improved students' academic performance in public junior secondary schools in Emohua Local Government Area of Rivers State, Nigeria

Table 8: Independent Samples z-test for Gender Differences on Sports Facilities Management

Gender	N	Mean (X)	SD	z-value	df	p-value	Remark
Male	200	3.20	0.88	4.002	378	0.000	P < 0.05, H04 Rejected
Female	180	3.05	0.86				

The z-test for gender differences in perceptions of sports facilities revealed that male teachers had a mean of 3.20 (SD = 0.88), while female teachers had a mean of 3.05 (SD = 0.86). The z-value of 4.002 and p-value of 0.000 confirm a significant difference at the 0.05 level. Male teachers tend to rate sports facilities including football fields, basketball courts, volleyball facilities, and table tennis equipment more positively in terms of their contribution to students' academic performance. This suggests that male teachers may place higher value on the role of physical activity and sports infrastructure in fostering student engagement, concentration, and overall performance. Female teachers, on the other hand, may be more critical of the adequacy or accessibility of sports resources.

Discussion of Findings

Administrative Offices Management and Students' Academic Performance

The findings of the study revealed that administrative offices, including principals' offices, bursaries, and library services, are generally perceived by teachers to be adequately managed, as reflected in the grand mean of 3.45. This indicates that the presence of functional and well-organized administrative structures plays a vital role in facilitating students' academic performance. Efficient administrative offices contribute to the smooth coordination of school activities, timely dissemination of information, accurate record-keeping, and overall support for teaching and learning processes. The study further revealed a significant gender difference in perceptions ($z = 4.885$, $p < 0.05$), with male teachers rating the management of administrative offices more positively than female teachers. This disparity could stem from differences in professional experiences, roles, or levels of engagement with administrative procedures, suggesting that male teachers may perceive administrative systems as more effective due to their interactions or positions within the school hierarchy. These findings are consistent with earlier research indicating that well-managed administrative systems are central to the academic success of students. Adeyemi (2019) emphasized that the efficiency of principals' offices, bursaries, and record-keeping units directly impacts teachers' ability to deliver lessons effectively and monitor student progress. Similarly, Nwokoro & Obiefuna (2020) found that schools with organized administrative structures report higher student achievement, attributing this to improved decision-making, streamlined communication, and readily accessible educational resources. Olaleye (2018) also observed that administrative effectiveness, particularly in handling student records and facilitating library services, significantly influences both teaching quality and student learning outcomes. Moreover, the observed gender difference aligns with studies by Oloruntoba and Akinyemi (2018), which suggested that male and female teachers may differ in their engagement with school administration, potentially affecting their perceptions of resource adequacy and operational

effectiveness. The findings highlight the critical importance of sustaining functional administrative offices as part of broader school facility management. They suggest that school authorities should ensure that principals' offices, bursaries, and libraries are adequately equipped, well-maintained, and accessible to both staff and students.

Learning Facilities Management and Students' Academic Performance

The study revealed that learning facilities, including classrooms, laboratories, textbooks, libraries, and ICT resources, are generally perceived by teachers to be adequately managed, as reflected in the grand mean of 3.45. This indicates that the availability, functionality, and proper maintenance of these learning resources play a crucial role in enhancing students' academic performance. Adequate learning facilities provide an enabling environment that supports practical exercises, research, self-directed learning, and effective lesson delivery, which are all essential for improving students' engagement and achievement. The significant gender difference ($z = 3.912$, $p < 0.05$) suggests that male teachers perceive learning facilities as more adequately managed than female teachers. This disparity may reflect differences in expectations or critical evaluation, with female teachers potentially being more sensitive to gaps in resource availability, accessibility, or utilization. These findings align with previous studies emphasizing the critical role of learning facilities in students' academic success. Eze et al. (2021) reported that the adequacy and functionality of classrooms, laboratories, and libraries significantly influence student engagement and achievement, noting that well-resourced schools tend to produce higher-performing students. Similarly, Oloruntoba & Akinyemi (2018) highlighted that access to ICT facilities and updated learning materials enhances instructional delivery and encourages students to participate actively in learning activities. Olaleye (2019) further observed that poorly maintained or insufficient learning resources negatively impact teaching effectiveness and student performance, underscoring the importance of regular maintenance and timely resource updates. The findings underscore the need for school administrators and policymakers to prioritize the provision, maintenance, and continual updating of learning facilities. Ensuring adequate laboratory equipment, textbooks, library resources, and ICT tools not only enhances teaching quality but also fosters a conducive learning environment that promotes student achievement.

Health Facilities Management and Students' Academic Performance

The findings of the study indicate that health facilities in schools, including sick bays, first aid provisions, treated mosquito nets, and sanitation measures, were moderately rated by teachers, with a grand mean of 3.31. This suggests that while health facilities are present and contribute to students' academic outcomes, there may still be gaps in adequacy, accessibility, or maintenance. The independent samples t-test revealed a significant gender difference ($z = 2.874$, $p < 0.05$), with male teachers rating health facilities higher than female teachers. This indicates that male teachers may perceive health provisions as more adequate or effective in supporting learning, whereas female teachers may be more critical, possibly due to closer observation of health service delivery and students' well-being. These findings are consistent with prior research emphasizing the critical role of school health facilities in promoting student learning and performance. Okeke and Nwankwo (2017) noted that well-equipped sick bays and accessible first aid resources reduce school absenteeism, enabling students to participate fully

in academic activities. Uchegbu (2019) further observed that the presence of health facilities and trained personnel in schools positively influences student attendance, concentration, and overall learning outcomes. In addition, Adeyemi (2018) highlighted that proper sanitation and mosquito control measures contribute to a healthy school environment, minimizing health-related disruptions to learning. The gender difference in perception also mirrors findings by Olaleye (2020), which suggested that male and female teachers may prioritize different aspects of health management, with female teachers more attuned to gaps in service delivery or student care. The results underscore the importance of sustained investment in school health infrastructure, including the provision of trained nurses, functional sick bays, first aid supplies, and sanitation facilities. Schools that prioritize these provisions create an environment conducive to learning, where student health is safeguarded, attendance is maximized, and academic performance can improve.

Sports Facilities Management and Students' Academic Performance

The findings of this study indicate that sports facilities, including football fields, basketball courts, volleyball courts, and table tennis equipment, are generally perceived to positively influence students' academic performance, with a grand mean of 3.32. This demonstrates that the provision and management of sports facilities in schools play an important role in supporting both the physical and academic development of students. Regular access to well-maintained sports infrastructure can enhance student engagement, concentration, and motivation, creating a conducive environment for learning. The independent samples t-test revealed a significant gender difference ($z = 4.002$, $p < 0.05$), showing that male teachers perceive sports facilities as more impactful on academic performance than female teachers. This difference may reflect variations in how male and female teachers value the role of physical activity in learning. Male teachers may place more emphasis on the benefits of sports for cognitive development and classroom performance, while female teachers may be more critical of facility adequacy, maintenance, or utilization. These findings are supported by previous research demonstrating the positive relationship between sports participation and academic outcomes. Oladele and Salami (2020) found that engagement in school sports improves students' concentration, discipline, and problem-solving abilities, which directly enhances learning performance. Similarly, Anigbogu and Emodi (2018) reported that well-structured sports programs increase student motivation, teamwork, and resilience, all of which contribute to better academic results. Adeyemi (2019) also emphasized that schools with functional sports facilities provide opportunities for students to develop physically, mentally, and socially, highlighting the interconnectedness of physical activity and academic success. The results underscore the necessity for school administrators and policymakers to invest in and maintain adequate sports infrastructure. Proper planning, regular maintenance, and the provision of diverse sporting options can ensure that students benefit fully from physical activities, not only for health and fitness but also for enhanced learning outcomes.

Conclusion

The study established that the management of school facilities encompassing administrative offices, learning resources, health facilities, and sports infrastructure significantly influences students' academic performance in public junior secondary schools in Emohua Local

Government Area of Rivers State. The findings indicated that well-maintained and adequately equipped facilities create a conducive environment for learning, enhance teacher effectiveness, and support students' overall development. The study confirms that proper planning, provision, and maintenance of school facilities are essential for achieving improved academic outcomes. It emphasizes the need for school administrators, policymakers, and other stakeholders to prioritize school facilities management as a key component of educational quality, ensuring that all resources whether administrative, learning, health, or sports are functional, accessible, and regularly updated.

Recommendations

Based on the findings of this study, the following recommendations are put forward:

1. Schools should implement a systematic maintenance schedule for administrative offices, learning facilities, health and sports infrastructure.
2. Public junior secondary schools should invest in well-equipped sick bays, first aid provisions, treated mosquito nets, and sanitation facilities.
3. School management should ensure that all students have access to essential learning resources such as textbooks, laboratory equipment, ICT tools, and library services.
4. School authorities should actively seek and incorporate feedback from both male and female teachers when planning, managing, and evaluating school facilities.

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