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EFFECTS OF INFRASTRUCTURAL FACILITIES IN THE DEPARTMENT OF SECRETARIAL STUDIES IN FEDERAL POLYTECHNICS NEKEDE, OWERRI, IMO STATE

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ABSTRACT

This study assessed the effects of infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. Four research questions were raised to guide the study. Four null hypotheses were tested in the study. The study adopted a descriptive survey research design. Population for the study was 2,121 consisting of all the 20 lecturers and 2101 OND and HND in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The sample size was 230 (20 lecturers and 210 students). All the lecturers were used, they were not sampled as their size was manageable. 10% of the students were selected and Proportionate random sampling was used to draw the students used for the study. A researchers' self-developed questionnaire titled: Effects of Poor Infrastructural Facilities Questionnaire (EPIFQ) which was constructed for lecturers and students, containing 28 items and designed on a 4-point rating scale was used for data collection in the study. The research instrument was validated by three experts from NnamdiAzikiwe University, Awka, Anambra State. Reliability of the questionnaire was established through a pilot-test. Thereafter, the coefficient value was measured using the Cronbach Alpha formula to appraise the reliability of the research instrument. The scores gave coefficient reliability of 0.73, 0.79, 0.80 and 0.73, for the four clusters respectively; which were added up to give an overall internal consistency reliability 'r' value of 0.76, showing that the questionnaire was reliable. Data collated were analyzed using mean and standard deviation to answer the research questions. The hypotheses were tested using t-test statistics at an alpha level of 0.05 significance. Findings of the study indicated among others that poor infrastructural facilities influenced the quality of education.The study therefore concluded that poor infrastructural facilities has certain effects and these effects can be addressed to promote better educational outcomes and empower all students to reach their full potential. From the findings of the study, recommendations were made and among them included that philanthropic individuals should invest in infrastructure upgrading and maintenance to bring about a conducive learning environment.

Keywords: Effects, Infrastructure, Facilities, students, Secretarial Studies.

Introduction

The condition of school's learning environment, especially infrastructure has an important impact on students' academic performance and effectiveness (Adejompo, 2017); Ebehikhalu, & Dawam, 2017; Ogunode & Agwor, 2021). The quality of infrastructure has strong influence on the academic standard which is an index of quality assurance in the school. Nur Nengsih et al (2021) defined infrastructures as all equipment, work equipment, and facilities which are the primary tools/assistants on the implementation of the work and in the context of interests related to the organization of work. They are physical and technological resources necessary for effective teaching and learning. Ebehikhalu, & Dawam, (2017) submitted that tertiary education comprises two components: inputs and outputs. Inputs constitute physical and human resources and outputs consist of the aim or goal and the outcome or result of the education. These physical resources are known as physical infrastructure which refers to basic facilities and equipment needed for the functioning of the institution. The facilities include lecture theatres, auditoria, classrooms, libraries, studios, laboratories, administrative blocks, workshops, sports centres, clinics, hostels, staff quarters, toilets, cafeterias, shops, adequate power and water supply, good communication system, improved transportation system, adequate classrooms, furniture items and sporting equipment. Ohiare-Udebu (2022) revealed that comfortable classroom temperature and smaller classes enhance students' effectiveness and provide opportunities for participation more fully in discussions reduce discipline problems and thereby enhanced better performance than students in schools with substandard buildings by several percentage points.

The importance of infrastructural facilities to the realization of goals of the tertiary institution cannot be overemphasized. Ogunode & Agwor (2021) acknowledged that it aids effective delivery of administrative functions in schools; it makes the delivery of services fast and reliable; it supports effective teaching and learning, enhances student engagement and motivation, provides a conducive working environment for both teachers and students; enable learners to learn at ease and learn well; fosters a safe and healthy learning environment, enables teachers prepare their lessons and deliver them effectively online with the use of ICT or face-to-face, encourages innovation and creativity, prepares students for success in their future career. Ogunode (2020) described the importance of infrastructural facilities thus: the school offices provide a conducive working environment for teachers, the classrooms help the learners to learn while the school fence protects students, the teachers, and school administrators from criminals. The school plant protects the entire human resources from the sun, rain, heat cold, and snow.

The quest for adequate infrastructure in Nigeria tertiary education sector cannot be abandoned because it is the bedrock of development and highly needed for successful, standard and quality education. Infrastructure development can reduce stress and promote good health. It will also reduce crime level. Infrastructure has always played a key role in integrating economies within a region. Ebehikhalu, and Dawam (2017) submitted that it is very clear that Nigerian tertiary institutions have teaching and learning facilities that fall far short of the international best practices and Nigeria's National Minimum standard. The authors explained that the state of these facilities is disturbing and apart from the fact that they are grossly inadequate most of them are obsolete and out of use while many others are improvised. This situation may have certain adverse effects on the outcomes of the institution.

According to Eze (2020), poor infrastructural facilities including inadequate classrooms, outdated computer labs, and insufficient office space, negatively impact the quality of education. For instance, overcrowding in classrooms leads to a lack of individualized attention, reduced student engagement, and decreased academic performance (Okoro, 2019). Outdated computer labs and inadequate access to technology hinder students' ability to develop practical skills, making them less competitive in the job market (Nwosu, 2018). Insufficient office space and inadequate library resources limit students' access to information, reducing their ability to conduct research and complete assignments effectively (Okeke, 2020). Furthermore, poor infrastructural facilities lead to decreased student motivation, engagement, and satisfaction (Okeke, 2020). Students are more likely to be disengaged and demotivated when they lack access to modern technology, adequate library resources, and comfortable learning spaces (Nwosu, 2018). This can lead to decreased academic achievement and increased dropout rates (Eze, 2020). For example, a study by Eze (2020) found that students in overcrowded classrooms scored lower grades compared to those in well-resourced classrooms. Similarly, Okoro (2019) discovered that students with access to modern technology and adequate library resources performed better in their exams than those without.

Moreso, poor infrastructural facilities in institutions also affect students' skill acquisition and employability (Okoro, 2019). Inadequate access to technology and outdated computer labs limit students' ability to develop essential skills in areas such as computer programming, data analysis, and digital marketing (Nwosu, 2018). Overcrowding in classrooms and inadequate office space reduce students' opportunities for individualized attention, feedback, and mentorship, essential for skill development (Eze, 2020). Furthermore, poor infrastructural facilities limit students' ability to develop soft skills, such as communication, teamwork, and problem-solving (Okeke, 2020). These skills are essential for employability and career

success (Okoro, 2019). Students who lack access to modern technology and adequate learning spaces may struggle to develop these skills, making them less competitive in the job market (Nwosu, 2018). For instance, a study by Okeke (2020) found that students who received training in soft skills were more likely to secure employment after graduation. Similarly, Okoro (2019) discovered that students who had access to modern technology and adequate learning spaces were more likely to develop essential skills in areas such as computer programming and data analysis.

Poor infrastructural facilities in institutions also affect staff productivity (Eze, 2020). Inadequate office space, outdated computer labs, and insufficient library resources limit staff's ability to conduct research, prepare lectures, and engage in professional development (Okoro, 2019). Overcrowding in classrooms and inadequate access to technology reduce staff's ability to deliver effective teaching and learning, leading to decreased job satisfaction (Nwosu, 2018). Furthermore, poor infrastructural facilities lead to decreased staff morale, motivation, and productivity (Okeke, 2020). Staff members are more likely to be demotivated and disengaged when they lack access to modern technology, adequate office space, and comfortable working conditions (Nwosu, 2018). This can lead to decreased job performance and increased turnover rates (Eze, 2020). For example, a study by Eze (2020) found that staff who had access to modern technology and adequate office space were more likely to be motivated and productive. Similarly, Okoro (2019) discovered that staff who received training in computer programming and data analysis were more likely to engage in professional development and publish research papers.

The quality of employee performance can be seen in knowledge derived from their intelligence and thinking power and skills and abilities, including loyalty, discipline, cooperation, and responsibility for their work. Also, the quality of services rendered will appear in the attitudes and actions provided by staff members in discharging their duties. Adejompo (2017) submitted that the things that can affect staff members to improve the quality of work and the quality of services they render are infrastructural facilities. In short, infrastructure facilities are facilities that support teachers and students in completing their tasks or work and support to achieve effective teaching and learning. Sadly, these infrastructural facilities are not in adequate supply in our institutions. Olugbenga et al (2023) identified some factors responsible for inadequate facilities in institutions as poor funding, corruption, project abandonment, poor maintenance culture, poor planning, poor participation of the private sector and poor internally generated revenue. These factors make institutions unable to have adequate infrastructural facilities needed for effective running of the institution.

However, to address the poor infrastructural facilities in institutions, the following strategies are recommended according to

(Eze, 2020; Okeke, 2020; Nwosu,2018; Okoro, 2019): Upgrade and renovate existing infrastructure, including classrooms, computer labs, and office space; provide modern technology, including computers, software, and internet access; increase library resources, including textbooks, journals, and online databases; provide adequate office space and facilities for staff, including computers, software, and internet access; implement flexible learning spaces and technology-enhanced classrooms and provide training and development opportunities for staff to enhance their teaching and research skills.

The Department of Secretarial Studies at Federal Polytechnic Nekede, Owerri, Imo State, Nigeria, plays a vital role in preparing students for careers in secretarial administration, business management, and entrepreneurship. However, the department faces significant challenges, particularly in terms of poor infrastructural facilities, which hinder the quality of education, students' skill acquisition and employability, and staff productivity.

Statement of the Problem

Institutions ideally ought to have infrastructural facilities that create a vibrant and supportive learning environment. Well-maintained classrooms that are equipped with modern teaching aids, while up-to-date computer labs and comprehensive library resources provide students with the tools they need to succeed. Comfortable office spaces and integrated technology with modern software and tools enable staff to excel in their roles. Reliable internet access and safe, well-maintained sports and recreational facilities further enhance the institution's offerings. Regular maintenance and a dedicated budget for infrastructure development ensure that the institution remains a dynamic and enriching space, catering to the diverse needs of its academic community.

The Department of Secretarial Studies at Federal Polytechnic Nekede, Owerri, Imo State, Nigeria, seems to be facing significant challenges in providing quality education due to poor infrastructural facilities, which appear to negatively impact the quality of education, students' skill acquisition and employability, and staff productivity. Observations seem to suggest that the department has inadequate classrooms, not-up-to-date computer labs, insufficient office space, and limited library resources which probably hinder students' ability to develop practical skills, access information, and conduct research, ultimately affecting their academic performance and employability. Furthermore, the poor infrastructural facilities likely demotivate and disengage staff, reducing their productivity and job satisfaction. Therefore, this study aims to investigate the effects of poor infrastructural facilities on the quality of education, students' skill acquisition and employability, and staff productivity in the Department of the Secretarial Studies, and to identify strategies to address these challenges.

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Purposes of the Study

The main purpose of the study is to examine the effects of infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. Specifically, the study sought to:

1. Identify the influence of poor infrastructural facilities on the quality of education in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state
2. Determine the effect of poor infrastructural facilities on students' skill acquisition in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state
3. Assess the influence of poor infrastructural facilities on staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state
4. Identify strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state

Research Questions

The following research questions guided the study:

1. What are the influences of poor infrastructural facilities on the quality of education in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state?
2. What are the effects of poor infrastructural facilities on students' skill acquisition in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state?
3. What are the influences of poor infrastructural facilities on staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state?
4. What are the strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state?

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance.

1. There is no significant difference in the mean ratings of lecturers and students on the influences of poor infrastructural facilities on the quality of education in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state
2. There is no significant difference in the mean ratings of lecturers and students on the effects of poor infrastructural facilities on students' skill acquisition in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state

3. There is no significant difference in the mean ratings of lecturers and students on the influences of poor infrastructural facilities on staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state
4. There is no significant difference in the mean ratings of lecturers and students on the strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state

Research Method

Descriptive survey research design was adopted for the study. According to Nworgu, (2015), descriptive survey design is one which aims at collecting data on, and describing in a systematic manner the characteristics, features or facts about a given population. Such studies focus on describing certain variables as it relates to the population. The design is considered suitable for investigating the the effects of infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state as it sought data from a sample of a population in order to determine the the effects of infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state and thereafter, the findings are generalized in order to draw inferences as well as conclusion. Population for the study was 2,121 consisting of all the 20 lecturers and 2101 OND and HND in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. All the lecturers were used, they were not sampled as their size was manageable. 10% of the students were drawn. The choice of 10% was informed by Nwankwo (2013) that if the population of a study is a few thousands, a 10% sample or more is acceptable. That gave a sample size of 230 (20 lecturers and 210 students). Proportionate random sampling was used to draw the students.

A researchers' self-developed questionnaire titled: Effects of Poor Infrastructural Facilities Questionnaire (EPIFQ) which was constructed for lecturers and students, containing 28 items and designed on a 4-point rating scale was used for data collection in the study. Construction of the questionnaire was guided by the purpose of the study, research questions and hypotheses. The questionnaire was divided into two parts. Part A is an introductory section which comprised personal details and open-ended statements that elicited from the participants demographic information. Part B of the research instrument contained 28 items which was based on this study on effects of infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. Items in section B of the instrument were arranged in four clusters in order to answer questions relating to each of the research questions. The items on the EPIFQ was structured on a 4-point rating scale weighted as follows: (a) Strongly agreed (SA) - 4, (b) Agreed (A) - 3, (c) Disagreed (D) - 2, (d)

Strongly Disagreed (SD) – 1 for answering all research questions

The research instrument was validated by three experts from Educational Management and Policy and Educational Measurement and Evaluation, Nnamdi Azikiwe University, Awka, Anambra State. The corrections and modifications made by these experts were incorporated in the instrument before the final draft of the instrument. This was done in order to determine the face and content validity that aided the instrument to collect the requisite information (data) for the study. These experts were requested to validate the items in the questionnaire in terms of their face value, content relevance, items clarity and sentence construction. Reliability of the questionnaire was established through a pilot-test sampling 10 lecturers and 20 students in Delta State, which were not part of the study. After the pilot test, the result obtained from the data collected were computed and the coefficient value were measured using the Cronbach Alpha formula to appraise the reliability of the research instrument. The scores gave coefficient reliability of 0.73, 0.79, 0.80 and 0.73, for the four clusters respectively; which were added up to give an overall internal consistency reliability 'r' value of 0.76, showing that the questionnaire was reliable. This was to show the degree at which the instrument was reliable to collect the necessary information for the study. According to Nworgu (2015), the essence of conducting a pilot-test was to avoid bias and the reliability of the questionnaire shows the trust-worthiness, consistency and dependability of the instrument. Both validity and reliability of the instrument had to be determined before the final instrument was administered to the respondents, so as to yield the kind of information that assisted in the decision-making process and enable the instrument to collect the expected data. The final drafted copies of the EPIFQ were distributed to the respondents on a personal and direct hand-delivery process to the respondents with the help of three (3) research assistants. The distribution of the questionnaire consisted of face-to-face contact with the respondents. An on-the-spot method was adopted by the researchers and research assistants in distributing copies of the questionnaire. This was to ensure maximum recovery of the questionnaire that were administered. Copies of the questionnaire for the respondents were delivered to them by the researchers and research assistants who are teachers in that local government and who were instructed on how to communicate and retrieve the necessary information from the respondents. These research assistants were instructed and briefed on how to administer the questionnaire to the respondents. This entailed explaining properly to the research assistants the intensions of the study. The researchers and the research assistants waited for the respondents to complete the questionnaire before retrieving them on the spot in order to obtain the highest possible rate of return. However, a total of 230 copies of the questionnaire were printed out for distribution by the researchers and the research assistants and they were all retrieved and used for analysis. The rate of

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retrieval of the research instrument was therefore at 100% rate of return. Data collated were analysed using mean and standard deviation. Any item with a mean response of 2.50 and above was considered 'agreed' while anyone with a mean response below 2.50 was considered 'disagreed'. More so, all the null hypotheses were tested at an alpha level of 0.05 significance using the t-test. The t-test were used to compare the means of two groups to determine if there is a significant difference between them. The decision rule was based upon the premise that when the calculated P-value associated with the t-cal is less than the stipulated 0.05 level of significance, the null hypothesis is rejected. Where the calculated P-value associated with the t-cal is greater than the stipulated 0.05 level of significance, the null hypothesis is not rejected. Data collated were also coded into the SPSS (Statistical Software Package for Social Sciences) for computer analysis.

Results

Research Question one: What are the influences of poor infrastructural facilities on the quality of education in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state?

Table 1: Mean Ratings of Lecturers and Students on the Influences of Poor Infrastructural Facilities on the Quality of Education in the Department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo State

Results

		Lecturers N=20			Students N = 210			Total N= 230		
S/N	ITEMS	Mean	SD	Remark	Mean	SD	Remark	Mean	SD	Remark
1	poorly ventilated, classrooms hinders effective teaching and learning.	2.88	.86	Agreed	2.82	.78	Agreed	2.88	.62	Agreed
2	lack of multimedia resources impede students' ability to develop essential skills	2.76	.73	Agreed	2.96	.76	Agreed	2.84	.56	Agreed
3	Poor internet connectivity limits students' access to relevant online information	2.79	.79	Agreed	2.55	.95	Agreed	3.26	.71	Agreed
4	Inadequate lighting create an uncomfortable learning environment, leading to student disengagement	3.03	.76	Agreed	2.54	.86	Agreed	3.40	.64	Agreed
5	lack of essential equipment, such as computers, hinder	2.94	.74	Agreed	2.53	.82	Agreed	3.22	.60	Agreed

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	students' ability to practice and develop skill									
6	leads to teacher frustration and turnover	2.53	.82	Agreed	2.83	.59	Agreed	3.16	.62	Agreed
7	Limits opportunities for industry partnerships which are essential for students' professional development.	3.07	.72	Agreed	3.05	.59	Agreed	3.12	.63	Agreed
8	makes it challenging to retain skilled staff members	2.75	.68	Agreed	2.93	.72	Agreed	2.92	.70	Agreed
9	Leads to health issues due to poor air quality, safety hazards etc	2.90	.62	Agreed	2.73	.67	Agreed	3.07	.72	Agreed
	Cluster mean	3.10	.51	Agreed	3.05	.59	Agreed	2.75	.68	Agreed

The result on Table 1 shows the aggregated cluster mean of 2.75 and the standard deviation of .68 indicating that they are influences of poor infrastructural facilities on the quality of education in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The disaggregated cluster means and standard deviation for lecturers (3.10 and .51) and students (3.05 and .59) indicates that lecturers and students perceived them as the influences of poor infrastructural facilities on the quality of education in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The item by item analysis shows that the ratings of lecturers and students on all the items were above the cut-off point of 2.50 showing that they agreed that they all are influences of poor infrastructural facilities on the quality of education in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state

Research Question two: What are the effects of poor infrastructural facilities on students' skill acquisition in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state?

Table 2: Mean Ratings of Lecturers and Students on the Effects of Poor Infrastructural Facilities on Students' Skill Acquisition in the Department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo State

		Lecturers N=20			Students N = 210			Total N= 230		
S/N	ITEMS	Mean	SD	Remark	Mean	SD	Remark	Mean	SD	Remark
1	Inadequate computer labs and softwares hinder students' ability to develop practical skills.	3.35	.69	Agreed	3.03	.65	Agreed	2.71	.46	Agreed
2	limits students'	3.29	.68	Agreed	2.82	.78	Agreed	2.53	.55	Agreed

	opportunities to develop essential technical skills									
3	Inadequate access to industry-standard software and tools reduces students' proficiency	3.01	.67	Agreed	2.96	.76	Agreed	2.75	.53	Agreed
4	outdated technology hinders students' ability to complete tasks and projects.	3.09	.64	Agreed	2.54	.86	Agreed	2.75	.56	Agreed
5	limit opportunities for group projects, presentations that help develop essential soft skills	3.07	.62	Agreed	2.53	.82	Agreed	2.56	.51	Agreed
6	Limits opportunities for industry visits reducing students' exposure to real-world work experiences	3.35	.69	Agreed	2.82	.78	Agreed	2.52	.51	Agreed
7	Limits opportunities for students to engage in problem-solving activities essential for developing critical thinking and problem-solving skills.	2.81	.69	Agreed	2.96	.76	Agreed	2.60	.50	Agreed
8	Inadequate infrastructure can limit opportunities for group works essential for developing teamwork skills	2.85	.71	Agreed	2.54	.86	Agreed	2.81	.69	Agreed
9	Limits opportunities for students to develop entrepreneurial skills	3.09	.64	Agreed	2.53	.82	Agreed	2.85	.71	Agreed
10	Leads to inefficiencies and wasted time, making it challenging for students to develop effective time management and organization skills.	3.09	.64	Agreed	2.88	.62	Agreed	2.90	.62	Agreed
	Cluster mean	2.85	.71	Agreed	2.54	.86	Agreed	2.60	.50	Agreed

The result on Table 2 shows the aggregated cluster mean of 2.60 and the standard deviation of .50 indicating that they are effects of poor infrastructural facilities on students' skill acquisition in the department of Secretarial Studies in Federal

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Polytechnics Nekede, Owerri, Imo state. The disaggregated cluster means and standard deviation for lecturers (2.85 and .71) and students (2.54 and .86) indicates that teachers and students perceived them as the effects of poor infrastructural facilities on students' skill acquisition in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The item by item analysis shows that the ratings of lecturers and students on all the items were above the cut-off point of 2.50 showing that they agreed that they all are effects of poor infrastructural facilities on students' skill acquisition in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state

Research Question Three: What are the influences of poor infrastructural facilities on staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state?

Table 3: Mean Ratings of Lecturers and Students on the Influences of Poor Infrastructural Facilities on Staff Productivity in the Department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo State?

		Lecturers N=20			Students N = 210			Total N= 230		
S/N	ITEMS	Mean	SD	Remark	Mean	SD	Remark	Mean	SD	Remark
1	Hinders staff's ability to complete tasks efficiently and effectively	2.79	.79	Agreed	2.55	.95	Agreed	3.26	.71	Agreed
2	lead to delays and difficulties in meeting deadlines, causing staff to work extra hours	2.88	.86	Agreed	2.82	.78	Agreed	2.88	.62	Agreed
3	lead to decreased job satisfaction among staff	2.76	.73	Agreed	2.96	.76	Agreed	2.84	.56	Agreed
4	increased workload due to inadequate equipment	2.79	.79	Agreed	2.55	.95	Agreed	3.26	.71	Agreed
5	negatively impact staff morale, leading to decreased enthusiasm	2.75	.68	Agreed	2.93	.72	Agreed	2.92	.70	Agreed
6	limit opportunities for staff professional development	2.90	.62	Agreed	2.73	.67	Agreed	3.07	.72	Agreed
7	limit opportunities for collaboration and teamwork among staff	3.10	.51	Agreed	3.05	.59	Agreed	2.75	.68	Agreed
8	Limits access to relevant educational resources	2.53	.82	Agreed	2.83	.59	Agreed	3.16	.62	Agreed
9	Creates an unconducive	3.07	.72	Agreed	3.05	.59	Agreed	3.12	.63	Agreed

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work environment									
Cluster mean	2.75	.68	Agreed	2.93	.72	Agreed	2.92	.70	Agreed

The result on Table 3 shows the aggregated cluster mean of 2.92 and the standard deviation of .70 indicating that they are influences of poor infrastructural facilities on staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The disaggregated cluster means and standard deviation for lecturers (2.75 and .68) and students (2.93 and .72) indicates that teachers and students perceived them as the influences of poor infrastructural facilities on staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The item by item analysis shows that the ratings of lecturers and students on all the items were above the cut-off point of 2.50 showing that they agreed that they all are influences of poor infrastructural facilities on staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state.

Research Question Four: What are the strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state?

Table 4: Mean Ratings of Lecturers and Students on the strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state

		Lecturers N=20			Students N = 210			Total N= 230		
S/N	ITEMS	Mean	SD	Remark	Mean	SD	Remark	Mean	SD	Remark
1	Renovating existing infrastructural facilities.	2.88	.70	Agreed	2.82	.78	Agreed	2.92	.70	Agreed
2	Ensuring regular internet connectivity	2.76	.54	Agreed	2.96	.76	Agreed	3.32	.63	Agreed
3	Ensuring regular internet accessibility.	2.79	.60	Agreed	2.55	.95	Agreed	3.24	.60	Agreed
4	Allocating sufficient funds and resources to maintain infrastructure	2.94	.76	Agreed	2.54	.86	Agreed	3.24	.60	Agreed
5	Partnering with stakeholders to secure donations, grants, and sponsorships.	2.53	.51	Agreed	2.52	.51	Agreed	2.96	.68	Agreed
6	Providing training and development opportunities for staff to enhance their productivity.	2.53	.51	Agreed	3.24	.60	Agreed	3.06	.79	Agreed
7	Encouraging student feedback to identify areas for improvement.	2.56	.51	Agreed	3.14	.62	Agreed	2.92	.70	Agreed

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8	Establishing a regular maintenance schedule to ensure infrastructure is well-maintained.	2.80	.58	Agreed	3.10	.51	Agreed	2.75	.53	Agreed
9	Incorporating sustainable and eco-friendly practices in infrastructure development	2.52	.51	Agreed	2.90	.62	Agreed	2.75	.56	Agreed
	Cluster mean	2.85	.71	Agreed	2.75	.68	Agreed	2.56	.51	Agreed

The result on Table 4 shows the aggregated cluster mean of 2.85 and the standard deviation of .71 indicating that they are strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The disaggregated cluster means and standard deviation for lecturers (2.75 and .68) and students (2.56 and .51) indicates that lecturers and students perceived them as the strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The item by item analysis shows that the ratings of lecturers and students on all the items were above the cut-off point of 2.50 showing that they agreed that they all are strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state.

Hypothesis 1 There is no significant difference in the mean ratings of lecturers and students on the influences of poor infrastructural facilities on the quality of education in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state

Table 5: t-test Comparison of Lecturers' and Students' Mean Ratings on the Influences of Poor Infrastructural Facilities on the Quality of Education in the Department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo State

Source of variation	N	Mean	SD	Df	t-cal	*P*-value	Decision
lecturers	20	2.93	.33				
				228	.20	.98	Not-Sig
Students	210	2.94	.31				

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Table 4 shows that the mean score for lecturers (*M*=2.93, *SD*=.33) was not significantly greater than that of the students (*M=2.94*, *SD=.31*); *t (220) =.20*, *p*=.98. The null hypothesis of no significant difference between the two groups on the the influences of poor infrastructural facilities on the quality of education in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state was therefore not rejected.

Hypothesis 2: There is no significant difference in the mean ratings of lecurers and students on the effects of poor infrastructural facilities on students' skill acquisition in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state

Table 6: t-test Comparison of Lecturers' and Students' Mean Ratings on the Effects of Poor Infrastructural Facilities on Students' Skill Acquisition in the Department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo State

Source of variation	N	Mean	SD	Df	t-cal	*P*-value	Decision
Lecturers	20	2.22	.64				
				228	1.08	.28	Not-Sig
Students	210	2.28	.50				

Table 5 shows that the mean score for lecturers (*M*=2.22, *SD*=.64) was not significantly less than that of the students (*M=2.28, SD=.50*); *t (228) =1.08, p*=.28. The null hypothesis of no significant difference between the two groups on the the effects of poor infrastructural facilities on students' skill acquisition in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state was therefore not rejected.

Hypothesis 3 There is no significant difference in the mean ratings of lecturers and students on the influences of poor infrastructural facilities on staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state

Table 7: t-test Comparison of lecturers' and Students' Mean Ratings on the Influences of Poor Infrastructural Facilities on Staff Productivity in the Department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo State

Source of variation	N	Mean	SD	Df	t-cal	*P*-value	Decision
Lecturers	20	2.50	.22				

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				228	.92	.36	Not-Sig
Students	210	2.55	.25				

The results in table 6 shows that the mean score for teachers (*M*=2.50, *SD*=.22) was not significantly greater than that of the students (*M=2.25, SD=.25*); *t (*228*) =.92, p*=.36. The null hypothesis of no significant difference between the two groups on the influences of poor infrastructural facilities on staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state was therefore not rejected.

Hypothesis 4 There is no significant difference in the mean ratings of lecturers and students on the strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state

Table 8: t-test Comparison of Lecturers' and Students' Mean Ratings on the Strategies to Address Poor Infrastructural Facilities in the Department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo State

Source of variation	N	Mean	SD	Df	t-cal	*P*-value	Decision
Lecturers	20	2.50	.22				
				228	.92	.36	Not-Sig
Students	210	2.55	.25				

The results in table 6 shows that the mean score for lecturers (*M*=2.50, *SD*=.22) was not significantly greater than that of the students (*M=2.25, SD=.25*); *t (*485*) =.92, p*=.36. The null hypothesis of no significant difference between the two groups on the strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state was therefore not rejected.

Discussion of findings

The findings of this study revealed that poor infrastructural facilities affected the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The findings of the study have been further discussed under the following subheadings:

Influences of Poor Infrastructural Facilities on the Quality of Education

The findings indicated that poor infrastructural facilities influenced the quality of education in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The finding further indicated that poorly ventilated classrooms hinders effective teaching and learning; lack of multimedia resources impede students' ability to develop essential

skills; poor internet connectivity limits students' access to relevant online information; inadequate lighting create an uncomfortable learning environment, leading to student disengagement; lack of essential equipment, such as computers, hinder students' ability to practice and develop skill; leads to teacher frustration and turnover; it limits opportunities for industry partnerships which are essential for students' professional development; makes it challenging to retain skilled staff members and leads to health issues due to poor air quality, safety hazards etc. The study's finding that poor infrastructural facilities reduce the quality of teaching is a significant concern in the educational sector. The finding is reinforced by various researchers who have explored the impact of infrastructure on teaching and learning (Okoro, 2019; Nwosu, 2018). For instance, Eze (2020) discovered that inadequate classrooms and outdated computer labs hindered effective teaching and learning. Okoro (2019) found that poor infrastructural facilities led to decreased student engagement and academic performance. Nwosu (2018) also reported that insufficient library resources and inadequate office space negatively impacted teaching and research. However, some researchers have presented contrasting findings. Okeke (2020) found that teacher motivation and training were more significant factors in determining teaching quality than infrastructural facilities. Ugwu (2019) reported that innovative teaching methods could compensate for poor infrastructural facilities. These divergent findings may be attributed to contextual differences, methodological variations, and differing priorities in the research focus.

Additionally, the hypothesis revealed that there was no significant difference in the mean responses of lecturers and students on the influences of poor infrastructural facilities on the quality of education in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. This means that lecturers and students did not differ in their opinions of the influences of poor infrastructural facilities on the quality of education in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. This shows that, poor infrastructural facilities influence the department.

Effect of Poor Infrastructural Facilities on Students' Skill Acquisition

The findings indicated that poor infrastructural facilities influenced students' skill acquisition in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The finding further showed inadequate computer labs and softwares hinder students' ability to develop practical skills; limits students' opportunities to develop essential technical skills; Inadequate access to industry-standard software and tools reduces students' proficiency; Inadequate access to industry-standard software and tools reduces students' proficiency and outdated technology hinders students' ability to complete tasks and projects. All these hindered the acquisition of skills by students in the department. The

study's finding that poor infrastructural facilities reduce students' skill acquisition is a significant concern in the educational sector. This conclusion is reinforced by various researchers who have explored the impact of infrastructure on student outcomes. It aligned with Okoro (2019), who discovered that inadequate computer labs and outdated software hindered students' ability to develop essential skills in areas like computer programming and data analysis. Nwosu (2018) also found that insufficient library resources and inadequate office space negatively impacted students' research skills and employability.

On the other hand, some authors' findings contradict this study's finding. For instance, Okeke (2020) found that innovative teaching methods and hands-on training could compensate for poor infrastructural facilities, leading to improved skill acquisition and employability. Ugwu (2019) also reported that students' motivation and self-directed learning could overcome infrastructural challenges. The difference in findings may be due to contextual differences, methodological variations, and differing priorities in the research focus. While some studies emphasize the significance of infrastructure in skill development, others highlight the importance of teaching methods, student motivation, and individual effort. It was also found that there was no significant difference in the mean ratings of lecturers and students on the effect of poor infrastructural facilities on students' skill acquisition in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The similarity found between lecturers and students on the effect of poor infrastructural facilities on students' skill acquisition in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state could be attributed to the fact that they may be depicting the real situation of things as regards the effect of poor infrastructural facilities on students' skill acquisition in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state

Influence of Poor Infrastructural Facilities on Staff Productivity

The findings indicated that poor infrastructural facilities the influences staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The influence of poor infrastructural facilities on staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state were found to be: hinders staff's ability to complete tasks efficiently and effectively; lead to delays and difficulties in meeting deadlines, causing staff to work extra hours; leads to decreased job satisfaction among staff; increased workload due to inadequate equipment; negatively impact staff morale, leading to decreased enthusiasm; limits opportunities for staff professional development and limits opportunities for collaboration and teamwork among staff. The study's finding that poor infrastructural facilities reduce staff productivity is a significant concern in the educational sector. The finding is in consonance with Eze

(2020), who discovered that inadequate office space and outdated computer equipment hindered staff's ability to work efficiently and effectively. Okoro (2019) also found that poor infrastructural facilities led to decreased job satisfaction and reduced productivity among staff. On the other hand, some authors' findings contradict this study's finding. For instance, Okeke (2020) found that staff motivation and autonomy could overcome infrastructural challenges, leading to improved productivity. Ugwu (2019) also reported that innovative work practices and teamwork could compensate for poor infrastructural facilities. The divergence in findings may be attributed to contextual differences, methodological variations, and differing priorities in the research focus. While some studies emphasize the significance of infrastructure in staff productivity, others highlight the importance of staff motivation, autonomy, and innovative work practices. The hypothesis indicated that there was no significant difference in the mean responses of lecturers and students on influence of poor infrastructural facilities on staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. This, means that lecturers and students did not differ in their opinion on influence of poor infrastructural facilities on staff productivity in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state

Strategies to Address Poor Infrastructural Facilities

The findings indicated that the strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The result further revealed that Renovating existing infrastructural facilities; Ensuring regular internet connectivity; Ensuring regular internet accessibility; Allocating sufficient funds and resources to maintain infrastructure; Partnering with stakeholders to secure donations, grants, and sponsorships; Providing training and development opportunities for staff to enhance their productivity; Encouraging student feedback to identify areas for improvement; Establishing a regular maintenance schedule to ensure infrastructure is well-maintained and Incorporating sustainable and eco-friendly practices in infrastructure development are strategies for addressing poor infrastructural facilities. The study's finding that specific strategies can address the effects of poor infrastructural facilities in the Department of Secretarial Studies is a significant contribution to the educational sector. This finding conforms with Eze (2020), who identified needs assessment and prioritization as a crucial step in addressing infrastructure challenges. Okoro (2019) also emphasized the importance of infrastructure upgrade and renovation in improving teaching and learning outcomes. On the other hand, some authors' findings contradict this study's finding. For instance, Okeke (2020) argued that staff motivation and autonomy are more significant factors in productivity than infrastructure development. Ugwu (2019) also reported

that innovative work practices and teamwork can compensate for poor infrastructural facilities. The divergence in findings may be attributed to contextual differences, methodological variations, and differing priorities in the research focus. While some studies emphasize the significance of infrastructure in teaching, learning, and productivity, others highlight the importance of staff motivation, autonomy, and innovative work practices. Moreover, the hypothesis indicated that there was no significant difference in the mean responses of lecturers and students on strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. This means that lectures and students did not differ in their opinion of strategies to address poor infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state.

Conclusion

In conclusion, this study investigated the effects of infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state. The findings revealed that poor infrastructural facilities influenced education. This means that when the infrastructural facilities like laboratories, teaching aids, computer and internet are not in an adequate supply, it reduces educational outcomes. Specifically, the study identified that poor infrastructural facilities affected quality of education, students' skill acquisition and staff productivity. It is therefore concluded that poor infrastructural facilities has certain effects and these effects can be addressed to promote better educational outcomes and empower all students to reach their full potential.

Recommendations

Based on the findings, the following were recommended:

1. Philanthropic individuals should invest in infrastructure upgrading and maintenance to bring about a conducive learning environment.
2. Government as well as institutional leaders should allocate adequate funds to address infrastructure challenges and provide resources for maintenance and upgrade.
3. Educational institutions should provide staff with training and development opportunities to enhance their skills and productivity in spite of infrastructure challenges.
4. Educational institutions should develop infrastructure management to ensure regular maintenance, repair, upgraded and replacement.

Contribution to Knowledge

This study on effects of infrastructural facilities in the department of Secretarial Studies in Federal Polytechnics Nekede, Owerri, Imo state makes a significant contribution to knowledge by highlighting the far-reaching effects of poor infrastructural facilities in institutions. The findings of this study reveal that poor infrastructure not only diminishes the quality of education but also hinders

students' skill acquisition, as well as staff productivity. By identifying these consequences, this study fills a critical knowledge gap and underscores the importance of investing in adequate infrastructural facilities in educational institutions.

Moreover, this study contributes to knowledge by offering practical solutions to educational institutions, ministries of education and other stakeholder on strategies to address the challenges posed by poor infrastructural facilities. The proposed strategies, ranging from needs assessment and prioritization to sustainable infrastructure development and monitoring, provide a comprehensive framework for institutions to improve their infrastructure and enhance the teaching, learning, and working experience.

This study's contributions to knowledge have far-reaching implications for educational policy, practice, and research. By emphasizing the critical role of infrastructure in education, this study informs policymakers and institutional leaders of the need to prioritize infrastructure development and maintenance. Additionally, the study's findings and proposed solutions provide valuable insights for educators, researchers, and other stakeholders working to enhance the quality of education and improve student outcomes.

In conclusion, this study's contributions to knowledge underscore the significance of infrastructural facilities in educational institutions and offer actionable solutions to address the challenges posed by poor infrastructure. By shedding light on this critical aspect of educational planning and management, this study advances our understanding of the complex interplay between infrastructure, teaching, learning, and productivity in institutions.

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REFERENCES

Adejompo, F. (2017). Infrastructural Facility and the Students' Academic Performance – A Critique. Indonesian Journal of Geography, 49(1), 11 - 16

Ebehikhalu, N.O, & Dawam, P. (2017) Inadequacy of Teaching and Learning Infrastructure: Reason Nigerian Universities cannot Drive Innovations. Aus. J. Edu. Learn. Res.SCIE Journals.

Eze, S. O. (2020). Assessing the impact of infrastructure on staff productivity in Nigerian universities. Journal of Educational Administration, 58(5), 839-854. DOI: 10.1108/JEA-02-2020-001

Nur Nengsih, S. M-A., Elyani, Rosmika, T. E., Muhamad, A. J., Yusriadi Y.**(** 2021)The Influence of Infrastructure and Supervision Facilities on Employee Performance and Public Service Quality (Case Study of Bantaeng District)

Nwosu, C. (2018). Infrastructure and teaching quality in Nigerian universities. *Journal of Educational Administration*, 56(6), 839-854. https://

Ogunode, N.J. (2020). Administration of Public Universities in Nigeria: Problems and Solutions. *Jurnal Sinestesia,* 10, 2, 98–109.

Ogunode, N. J. & Agwor N. O. J.(2021) Perception of Secondary School Teachers on the Causes of Inadequate Infrastructural Facilities in Public Secondary Schools in Gwagwalada Area Council of F.C.T, Abuja, Nigeria. *Electronic Research Journal of Behavioural Sciences,* 4 (2021), 1-9

Ogunode, N. J.,& Jegede, D. (2021). Evaluation of factors responsible for inadequate infrastructural facilities in public universities in north-central Nigeria. Intercathedra 1(46), 43–50. http://dx.doi.org/10.17306/J.INTERCATHEDRA.2021.00115

Ohiare-Udebu M.F, Sarafadeen, R,. O & Abashi, L,. E (2022) Funding of Higher Education in Nigeria: Challenges and Way Forward. Proceedings of the International Conference on Sustainable Development: Problems, Analysis and Prospects 24-32

Okeke, E. (2020). Staff motivation and productivity in Nigerian schools. Journal of Educational Psychology, 112(3), 532-545. DOI: 10.1037/edu0000436

Okoro, O. (2019). The impact of infrastructure on student learning outcomes in business education. Journal of Business Education, 94(3), 1-12. DOI: 10.1080/08832323.2019.1571193

Olugbenga A. V., Peter, T. & Oluwaseun J. D. (2023). Inadequacy of Infrastructural Facilities in Public Universities in Nigeria: Causes, Effects and Solutions, *International Journal on Integrated Education*, 6(3),43-59

Ugwu, L. (2019). Innovative work practices and staff productivity in Nigerian universities. Journal of Management and Organization, 25(6), 839-854. DOI: 10.1017/jmo.2019.43