

**AN ASSESSMENT OF INSTITUTIONAL RESEARCH STANDARDS BY LECTURERS  
IN CAPTAIN ELECHI AMADI POLYTECHNIC, PORT HARCOURT**

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**Abstract**

This study assessed the institutional research standards as perceived by lecturers at Captain Elechi Amadi Polytechnic, Port Harcourt. The research examined the current state of research standards, identified challenges in maintaining research quality, and evaluated the effectiveness of existing research support systems. Using a descriptive survey design, data were collected from 150 lecturers across various departments through structured questionnaires. The findings revealed moderate adherence to research standards, with significant challenges including inadequate funding, limited research infrastructure, and insufficient training programs. The study recommended enhanced funding mechanisms, improved research infrastructure, and comprehensive faculty development programs to elevate research standards within the institution.

**Keywords:** *Institutional research standards, polytechnic education, research quality, faculty development, Nigeria*

**Introduction**

The quality of research in higher education institutions serves as a critical indicator of institutional effectiveness and academic excellence (Adeyemi & Adeyinka, 2003). In Nigeria's rapidly evolving educational landscape, polytechnics play a crucial role in technical and vocational education, contributing significantly to national development through applied research and innovation (Ogbonna & Okolie, 2023). The National Board for Technical Education (NBTE) is partnering with the Commonwealth of Learning (COL), to implement the Open, Distance, and Flexible eLearning (ODFeL) Standards and Accreditation Tool, and a Monitoring and Evaluation (M&E) Framework in Nigeria's Technical and Vocational Education and Training (TVET) system, emphasizing the growing importance of maintaining high standards in polytechnic education.

Research standards in educational institutions encompass various dimensions including research methodology, ethical considerations, publication quality, and institutional support systems (Okafor & Egbule, 2022). These standards are essential for ensuring the credibility, reliability, and impact of research outputs from academic institutions. The assessment of these standards becomes particularly important in polytechnic settings where applied research directly influences industrial and technological advancement (Eze & Nwosu, 2021).

Nigeria has one of the most robust education policies, but a major challenge is the implementation of the policies. Federal agencies such as the NUC, the NCCE, National Board for Technical Education, and TET-Fund are responsible for formulating, funding, monitoring and implementations of higher education teaching and research policies. This policy framework

provides the foundation for research standards in polytechnic institutions, yet implementation challenges persist across various institutions.

Captain Elechi Amadi Polytechnic, Port Harcourt, established as a premier technical institution in Rivers State, has been committed to advancing technical education and research within the Niger Delta region. The institution's research activities span various disciplines including engineering, applied sciences, management studies, and environmental technology. However, the extent to which the institution's research practices align with established standards requires systematic evaluation to ensure continuous improvement and quality assurance.

Previous studies have highlighted various challenges facing research in Nigerian polytechnics, including inadequate funding, limited research infrastructure, insufficient research training for faculty, and weak linkages with industry (Akpan & Ita, 2020; Bello & Mohammed, 2021). These challenges significantly impact the quality and quantity of research outputs from polytechnic institutions, necessitating comprehensive assessment and intervention strategies.

The importance of maintaining high research standards cannot be overstated in the context of global competitiveness and technological advancement. Institutions with robust research standards tend to produce higher quality graduates, attract better funding opportunities, and contribute more significantly to national development (UNESCO, 2023). Therefore, regular assessment of research standards becomes imperative for institutional growth and sustainability.

### **Statement of the Problem**

Despite the critical role of polytechnics in Nigeria's technical education system, concerns have been raised about the quality and standards of research activities in these institutions. Nigerian higher education to preserve academic standards while harnessing the benefits of AI. The study highlights ethical concerns such as data privacy, access inequality, and over-reliance on AI tools, which can undermine critical thinking skills, indicating the complex challenges facing research standards in contemporary Nigerian higher education.

Several issues have been identified that potentially compromise research standards in Nigerian polytechnics. These include limited research funding, inadequate research infrastructure, insufficient training for faculty members in research methodology, weak institutional research policies, and poor collaboration between institutions and industry partners (Adebayo & Ogunniyi, 2019). These challenges are particularly pronounced in polytechnics where the emphasis on practical and applied research requires specialized equipment and industry partnerships.

Furthermore, the rapid advancement in technology and research methodologies has created a gap between current practices and international standards. Many polytechnic lecturers lack exposure to contemporary research tools and methodologies, which affects the quality of their research outputs (Chukwu & Ezeh, 2022). This situation is compounded by limited opportunities for professional development and research capacity building.

The accreditation and quality assurance processes in Nigerian polytechnics also face challenges in ensuring compliance with research standards. While regulatory bodies like the National Board

for Technical Education (NBTE) have established guidelines, the implementation and monitoring of these standards at the institutional level remain problematic (Okafor et al., 2023). This creates inconsistencies in research quality across different institutions and departments.

Additionally, the integration of research activities with teaching and community service remains suboptimal in many polytechnics. Lecturers often struggle to balance their teaching loads with research responsibilities, leading to compromised research quality and reduced productivity (Amadi & Okoro, 2021). This challenge is further exacerbated by inadequate reward systems for research excellence and limited recognition of research achievements.

Given these challenges, there is an urgent need to systematically assess the current state of research standards in Captain Elechi Amadi Polytechnic, Port Harcourt, to identify specific areas requiring improvement and develop targeted interventions to enhance research quality and impact.

### **Objectives of the Study**

The main objective of this study is to assess the institutional research standards as perceived by lecturers in Captain Elechi Amadi Polytechnic, Port Harcourt. The specific objectives are:

1. To evaluate the current level of adherence to research standards by lecturers in Captain Elechi Amadi Polytechnic, Port Harcourt.
2. To identify the major challenges affecting the maintenance of research standards in Captain Elechi Amadi Polytechnic, Port Harcourt.
3. To assess the effectiveness of existing institutional support systems for research activities in Captain Elechi Amadi Polytechnic, Port Harcourt.

### **Research Questions**

Based on the stated objectives, the following research questions guided this study:

1. What is the current level of adherence to research standards by lecturers in Captain Elechi Amadi Polytechnic, Port Harcourt?
2. What are the major challenges affecting the maintenance of research standards in Captain Elechi Amadi Polytechnic, Port Harcourt?
3. How effective are the existing institutional support systems for research activities in Captain Elechi Amadi Polytechnic, Port Harcourt?

### **Methodology**

This study adopted a descriptive survey research design to assess the institutional research standards by lecturers in Captain Elechi Amadi Polytechnic, Port Harcourt. The choice of this design was appropriate as it allowed for the systematic collection and analysis of data to describe the current state of research standards within the institution.

### **Population and Sample**

The population for this study comprised all academic staff (lecturers) in Captain Elechi Amadi Polytechnic, Port Harcourt. The total population consisted of 300 lecturers across various departments and schools within the polytechnic. A sample size of 150 lecturers was selected using stratified random sampling technique to ensure adequate representation across different departments and academic ranks.

The stratification was based on the following criteria:

- Schools/Departments (Engineering, Applied Sciences, Business Studies, Environmental Studies)
- Academic ranks (Principal Lecturer, Senior Lecturer, Lecturer I, Lecturer II, Assistant Lecturer)
- Years of experience (Below 5 years, 5-10 years, 11-15 years, Above 15 years)

### **Instrumentation**

A structured questionnaire titled "Institutional Research Standards Assessment Questionnaire (IRSAQ)" was developed by the researcher for data collection. The questionnaire consisted of four sections:

- Section A: Demographic information of respondents
- Section B: Current level of adherence to research standards (15 items)
- Section C: Challenges affecting research standards (12 items)
- Section D: Effectiveness of institutional support systems (10 items)

The questionnaire used a 4-point Likert scale ranging from Strongly Agree (4) to Strongly Disagree (1) for sections B, C, and D.

### **Validity and Reliability**

The instrument was validated by three experts in educational measurement and evaluation, and two experts in polytechnic education. Their suggestions and recommendations were incorporated into the final version of the questionnaire. The reliability of the instrument was established through a pilot study conducted with 30 lecturers from a similar polytechnic institution. The Cronbach's alpha coefficient obtained was 0.85, indicating high internal consistency.

### **Data Collection and Analysis**

Data were collected through direct administration of questionnaires to the sampled lecturers. A response rate of 92% was achieved, with 138 completed questionnaires returned. Data analysis was conducted using descriptive statistics (means, standard deviations, and percentages) to answer the research questions. The criterion mean of 2.5 was used for decision making, where

mean scores of 2.5 and above indicated agreement, while scores below 2.5 indicated disagreement.

## Results

### Research Question 1: Current Level of Adherence to Research Standards

Table 1 presents the mean scores and standard deviations for items relating to the current level of adherence to research standards by lecturers.

**Table 1: Current Level of Adherence to Research Standards**

S/N	Items	Mean	SD	Remark
1	Lecturers follow proper research methodology in their studies	2.8	0.9	Agree
2	Research ethics are strictly observed in all research activities	2.6	1.1	Agree
3	Lecturers conduct literature reviews comprehensively	2.4	1.0	Disagree
4	Research proposals undergo rigorous review processes	2.3	1.2	Disagree
5	Data collection procedures follow established standards	2.7	0.8	Agree
6	Statistical analysis is appropriately applied in research	2.5	1.1	Agree
7	Research findings are properly documented and reported	2.9	0.7	Agree
8	Plagiarism checks are conducted for all research outputs	2.1	1.3	Disagree
9	Research collaborations follow institutional guidelines	2.4	1.0	Disagree
10	Intellectual property rights are protected in research	2.2	1.2	Disagree
11	Research publications meet international standards	2.0	1.1	Disagree
12	Peer review processes are effectively implemented	2.3	1.0	Disagree
13	Research data are properly stored and archived	2.1	1.1	Disagree
14	Continuous monitoring of research quality is maintained	2.2	1.2	Disagree
15	Research impact is regularly assessed and documented	1.9	1.0	Disagree
<b>Overall Mean</b>		<b>2.4</b>	<b>1.0</b>	<b>Disagree</b>

The results in Table 1 show that the overall mean score for adherence to research standards was 2.4, which is below the criterion mean of 2.5. This indicates that lecturers perceived the current level of adherence to research standards as moderate to low. While some aspects such as following proper research methodology (mean = 2.8), observing research ethics (mean = 2.6), and proper documentation of findings (mean = 2.9) showed agreement, several critical areas including plagiarism checks (mean = 2.1), research publications meeting international standards (mean = 2.0), and research impact assessment (mean = 1.9) showed significant deficiencies.

### **Research Question 2: Major Challenges Affecting Research Standards**

Table 2 shows the mean scores and standard deviations for challenges affecting the maintenance of research standards.

**Table 2: Challenges Affecting Research Standards**

<b>S/N</b>	<b>Items</b>	<b>Mean</b>	<b>SD</b>	<b>Remark</b>
1	Inadequate funding for research activities	3.4	0.8	Agree
2	Limited access to current research databases and journals	3.2	0.9	Agree
3	Insufficient research infrastructure and equipment	3.5	0.7	Agree
4	Heavy teaching loads limiting research time	3.3	0.8	Agree
5	Lack of research training and capacity building programs	3.1	1.0	Agree
6	Weak collaboration with industry and other institutions	2.9	1.1	Agree
7	Inadequate reward system for research excellence	3.2	0.9	Agree
8	Limited administrative support for research activities	2.8	1.0	Agree
9	Absence of clear research policies and guidelines	2.7	1.1	Agree
10	Lack of mentorship programs for junior researchers	3.0	0.9	Agree
11	Poor internet connectivity and ICT infrastructure	3.1	0.8	Agree
12	Limited opportunities for research dissemination	2.9	1.0	Agree
<b>Overall Mean</b>		<b>3.1</b>	<b>0.9</b>	<b>Agree</b>

Table 2 reveals that all identified challenges significantly affect the maintenance of research standards, with an overall mean score of 3.1. The most critical challenges include insufficient

research infrastructure and equipment (mean = 3.5), inadequate funding for research activities (mean = 3.4), and heavy teaching loads limiting research time (mean = 3.3).

### **Research Question 3: Effectiveness of Institutional Support Systems**

Table 3 presents the assessment of the effectiveness of existing institutional support systems for research activities.

**Table 3: Effectiveness of Institutional Support Systems**

<b>S/N</b>	<b>Items</b>	<b>Mean</b>	<b>SD</b>	<b>Remark</b>
1	Research and development office provides adequate support	2.1	1.2	Disagree
2	Library services meet research information needs	2.3	1.1	Disagree
3	ICT services support research activities effectively	2.0	1.0	Disagree
4	Research grant opportunities are readily available	1.8	1.1	Disagree
5	Training programs for research skills are regularly organized	2.2	1.2	Disagree
6	Administrative processes for research are streamlined	2.4	1.0	Disagree
7	Research collaboration is actively promoted	2.1	1.1	Disagree
8	Publication support services are available	1.9	1.0	Disagree
9	Research ethics committee functions effectively	2.3	1.1	Disagree
10	Regular research seminars and conferences are organized	2.5	0.9	Agree
<b>Overall Mean</b>		<b>2.2</b>	<b>1.1</b>	<b>Disagree</b>

The results in Table 3 indicate that existing institutional support systems are largely ineffective, with an overall mean score of 2.2. Only the organization of regular research seminars and conferences (mean = 2.5) met the criterion for agreement. Critical areas such as research grant opportunities (mean = 1.8) and publication support services (mean = 1.9) showed particularly low effectiveness ratings.

### **Discussion of Results**

The findings of this study revealed significant concerns about the state of institutional research standards in Captain Elechi Amadi Polytechnic, Port Harcourt. The moderate to low level of

adherence to research standards (overall mean = 2.4) aligns with previous studies that have highlighted quality concerns in Nigerian polytechnic education (Ogbonna & Okolie, 2023; Chukwu & Ezech, 2022). This situation reflects broader challenges facing the Nigerian higher education system, where policies, innovations, and practices seem disconnected or disjointed.

The study identified several areas where research standards are adequately maintained, including the adherence to basic research methodology and ethics. However, critical deficiencies were observed in areas such as plagiarism detection, publication quality, and research impact assessment. These findings are consistent with global trends where ethical concerns such as data privacy, access inequality, and over-reliance on AI tools, which can undermine critical thinking skills are becoming increasingly important in maintaining research standards.

The challenges identified in this study, particularly inadequate funding and insufficient research infrastructure, mirror findings from other studies on Nigerian polytechnics (Adebayo & Ogunniyi, 2019; Bello & Mohammed, 2021). The heavy teaching loads reported by lecturers (mean = 3.3) represent a significant barrier to research productivity, which is consistent with the findings of Amadi and Okoro (2021) who noted similar challenges in balancing teaching and research responsibilities.

The ineffectiveness of institutional support systems (overall mean = 2.2) represents a critical area requiring immediate attention. The lack of adequate research grant opportunities (mean = 1.8) and publication support services (mean = 1.9) significantly hampers the ability of lecturers to conduct and disseminate quality research. This finding supports the observation that Federal agencies such as the NUC, the NCCE, National Board for Technical Education, and TET-Fund are responsible for formulating, funding, monitoring and implementations of higher education teaching and research policies, yet implementation at the institutional level remains problematic.

The study also reveals the need for enhanced research capacity building programs. The reported lack of research training (mean = 3.1) and mentorship programs (mean = 3.0) indicates that many lecturers may lack the necessary skills to conduct research that meets international standards. This situation is particularly concerning given the rapid evolution of research methodologies and the increasing emphasis on evidence-based practices in education and technology.

The weak collaboration with industry and other institutions (mean = 2.9) represents a missed opportunity for polytechnics to fulfill their mandate of bridging the gap between academic research and practical application. Strong industry partnerships are essential for applied research in polytechnic settings, and their absence may contribute to the reduced relevance and impact of research outputs.

Recent developments in educational technology and artificial intelligence present both opportunities and challenges for maintaining research standards. As noted by recent studies, there is an urgent need for Nigerian higher education institutions to adapt to these technological changes while maintaining academic integrity and research quality (Adeyemi & Adeyinka, 2023).

## **Conclusion**

This study has provided valuable insights into the state of institutional research standards in Captain Elechi Amadi Polytechnic, Port Harcourt. The findings reveal that while some basic research practices are being followed, there are significant deficiencies in critical areas that affect overall research quality and impact. The challenges identified, particularly inadequate funding, insufficient infrastructure, and heavy teaching loads, represent systemic issues that require comprehensive institutional and policy-level interventions.

The ineffectiveness of existing support systems highlights the need for substantial improvements in institutional research infrastructure and support services. The study demonstrates that enhancing research standards requires a multi-faceted approach that addresses funding, infrastructure, capacity building, and institutional policies simultaneously.

The findings of this study have important implications for polytechnic education in Nigeria, particularly in the context of the ongoing efforts by regulatory bodies to improve standards and quality in technical and vocational education. The challenges and deficiencies identified provide a roadmap for targeted interventions that can significantly improve research quality and institutional effectiveness.

## **Recommendations**

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

1. The management of Captain Elechi Amadi Polytechnic should establish a dedicated research fund with annual budget allocation of at least 10% of the institution's total budget to support faculty research activities and infrastructure development.
2. The institution should invest in modern research infrastructure including laboratory equipment, software licenses, and high-speed internet connectivity to create an enabling environment for quality research.
3. A comprehensive faculty development program should be implemented to provide regular training on research methodology, statistical analysis, academic writing, and emerging technologies in research.
4. The polytechnic should establish strategic partnerships with industries, research institutes, and other academic institutions to promote collaborative research and knowledge exchange.
5. A robust research support office should be created with dedicated staff to assist faculty with grant applications, publication processes, and research administration.

6. The institution should implement a fair and transparent reward system that recognizes and incentivizes research excellence through promotions, bonuses, and other forms of recognition.
7. Clear research policies and guidelines should be developed and communicated to all faculty members, covering areas such as research ethics, intellectual property, and quality standards.
8. A mentorship program should be established to pair experienced researchers with junior faculty members to enhance research capacity and knowledge transfer.
9. The teaching workload distribution should be reviewed and balanced to allow adequate time for research activities, possibly through the employment of additional teaching staff or graduate assistants.
10. Regular research seminars, workshops, and conferences should be organized to provide platforms for knowledge sharing, collaboration, and dissemination of research findings.

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