

# Instructional Materials and ICT Facilities Situation as Correlates of Job Performance of Academic Staff in Southwest Nigerian Universities

**AUTHOR(S):** AKINYEMI, Tolulope Francisca (Ph.D)

## Abstract:

This study examined the relationship between instructional materials and ICT facilities with the job performance of academic staff in public universities in Southwest Nigeria. Adopting a descriptive survey design, the research encompassed 8,724 academic staff across six states, with a sample of 1,320 participants selected through a multi-stage sampling process. Two validated and reliable instruments, the Materials Resource Situation Questionnaire (MRSQ) and the Academic Staff Job Performance Questionnaire (ASJPQ), were employed to collect data. Hypotheses were tested using Pearson's Product Moment Correlation analysis at a 0.05 significance level, while descriptive statistics were used to address research questions. Results indicated a significant positive relationship between instructional materials and job performance ( $r = 0.638$ ,  $p < 0.05$ ), suggesting that the availability and quality of instructional resources directly enhance academic staff performance. This finding aligns with previous research highlighting the impact of instructional materials on effective teaching and institutional quality. The study also revealed a significant positive relationship between ICT facilities and job performance ( $r = 0.412$ ,  $p < 0.05$ ), emphasising the role of ICT in improving teaching, research, and administrative tasks. Adequate ICT resources were linked to increased efficiency and job satisfaction among academic staff. These findings underscore the importance of robust investments in instructional materials and ICT facilities to foster a conducive learning environment and optimise staff performance. Institutions that prioritise these resources are better positioned to enhance educational quality and achieve superior student outcomes. The

**CJAR**

Accepted 5 December 2024  
Published 15 December 2024  
DOI: 10.5281/zenodo.14543639



study recommends that universities regularly update instructional materials to accommodate diverse learning needs and modernise ICT facilities to align with current educational demands.

**Keywords:** Instructional Materials, ICT Facilities, Job Performance, Academic Staff, University,

About Author

**Author(s):**

**AKINYEMI, Tolulope Francisca (Ph.D)**  
Department of Educational Management,  
Faculty of Education, Ekiti State University,  
Ado – Ekiti, Nigeria



## Introduction

The academic staff plays a crucial role in the country's human resource development by training future workers. Folorunso, et al. (2014) have argued that the performance of academic staff is crucial because university education is a key pathway to developing the professionals required, including the experienced physicians, nurses, and community workers needed for improved welfare and health facilities, as well as the accountants, economists, and journalists needed for improved private enterprise and better governance. The efficiency and performance of academic staff members in carrying out their teaching, research, and community service tasks may be hampered by a lack of information or an insufficient allocation of financial, human, physical, and intellectual resources. This issue makes one wonder how the current state of resources in Southwest Nigerian universities relates to the overall academic job performance of the academic staff.

The academic staff's performance on the job in Southwest Nigerian universities has raised concerns about the academic reputation, research output, and the quality of education provided. Parents and students alike have voiced their dissatisfaction with the academic staff's handling of student learning, citing issues such as outmoded teaching strategies, a lack of topic knowledge, and poor communication. A funding agency like TETFund is unhappy with the academic staff's research output and productivity. They have complaints about academic staff not collaborating enough, not disseminating findings enough, and not contributing enough to the advancement of knowledge in relevant fields.

Additionally, the media reported on complaints regarding the professional conduct of academic staff. These complaints covered a wide range of topics, including unethical behaviour, conflicts of interest, and failure to conform to academic and institutional norms, among others. In terms of teaching, research, and community involvement, it would appear that some members of the academic staff are not up to par. Some academic staff members at universities don't seem to understand the course material, and even fewer seem enthusiastic about doing research or sharing their results in peer-reviewed journals. While some seem uninterested in getting involved in community service activities, some academic staff at universities seem completely unaware of its purpose. Inadequate performance in areas like as research, community service, and teaching will have a negative impact on their overall performance.

The majority of the university's non-consumable materials are considered material resources. The academic staff of Nigerian universities also appears to be confronted with the core problem of inadequate teaching materials. Educational institutions rely on instructional materials—a type of social capital—to facilitate the delivery of academic services such as teaching, research, and evaluation. Poor academic staff job performance is frequently due to a lack of teaching materials. Better job performance among university academic staff can be achieved, according to Nwagu (2016) and Manir (2019), if instructional materials are quality assured from the design stages all the way through to creation and functionality.

Inadequate ICT facilities appear to be another issue hurting the academic staff performance of Nigerian universities. Teaching, learning, and research have all been energised by information and communications technology (ICT), according to Adeyemi and Mary (2013). It has emerged as a powerful tool in the field of education. One of its most basic uses is to facilitate the creation of instructional slides for use in classrooms.



When it comes to propelling economic progress, ICT is among the most crucial factors. Among the many examples of ICT in the classroom, the most well-known is the personal computer. The acronym ICT, which stands for "information and communication technology," is among the most widely used phrases in the modern world. In a broad sense, information and communication technology (ICT) encompasses any and all systems and technologies that facilitate human communication through the creation, storage, processing, and use of information in all its forms (Olayanju & Asogwa, 2010). Staff members in the academic sector work in an era defined by rapid data processing and transmission, as well as the widespread adoption of information technology in all spheres of human activity.

The academic staff relies on information and communication technologies (ICTs) for a number of fundamental tasks, in addition to using them for instructional reasons. Adeyemi and Mary (2013) found that academic staff still rely on manual processes for most of their administrative work, including record keeping and result computation. This makes their jobs more difficult and slows down the administrative process. Instructional modes such as e-learning could make use of ICT. It is regrettable that many teachers in Nigerian colleges do not appear to have adequate ICT facilities in their offices for use in lectures or teaching, as this tends to have an impact on their job performance. The main purpose of the study was to examine instructional materials situation and ICT facilities situation as correlates of job performance of academic staff in Southwest Nigerian Universities.

The following research hypotheses were formulated for this study

1. There is no significant relationship between instructional materials situation and academic staff job performance
2. There is no significant relationship between ICT facilities situation and academic staff job performance

### **Literature review**

#### ***Instructional Materials Situation and Staff Job Performance***

Oyededeji (2012) asserts that the sufficiency of instructional facilities provided by a school is a key indication for assessing the quality and grade of education. He asserts that inadequate and low-quality teaching facilities significantly impair job performance.

Oyewole's (2009) research indicated that there is no significant association between the availability of instructional resources and teachers' job performance levels. He underscored that while the friendship was positive, it lacked significance. Akuegwu and Nwi-ue (2013) noted that the most effective criterion for assessing the standards and quality of academic institutions is a thorough evaluation of the infrastructural facilities available for facilitating teaching and learning in universities. Research on this topic confirmed their findings. Akpan et al. (2014) concluded that the utilisation of instructional materials will substantially enhance staff performance in the workplace.

Udu and Nkwede (2014) articulated the following in their study "Tertiary Education Trust Fund Interventions and Sustainable Development in Nigerian Universities": Evidence submitted by Ebonyi State University in Abakaliki indicated that "despite TETFund's involvement, tertiary institutions in Nigeria continue to lack the requisite funding to elevate their teaching materials and facilities to global standards." They concluded that enhancing the focus on instructional materials will improve the job performance of academic personnel.



Ajebelen (2016) examined the funding mechanisms of Nigerian institutions and their impact on institutional effectiveness. The African political economy model was utilised to comprehend the perilous financial circumstances confronting Nigerian institutions. Despite the federal government being accountable for around 90 percent of the funding, it has been unable to effectively finance the system due to the prevailing economic, social, and political conditions. The substandard quality of both teaching and research is evident due to a deficiency in instructional materials. He concluded that a lack of instructional resources adversely impacted academic job performance.

It can be inferred from the preceding information that instructional materials may be associated with staff job performance. This study will examine the relationship between the availability of instructional materials and the job performance of academic staff in universities in Southwest Nigeria.

### ***ICT Facilities Situation and Staff Job Performance***

Research by Bassey (2013) indicates that the use of computer systems for processing, storing, retrieving, and publishing student results is significantly associated with enhanced accuracy and elevated efficiency in the management of school activities in private schools in Kwara state. A study conducted in Madiha by Visshe and Wild (2014) revealed that an information system provides school administrators with immediate access to essential data regarding academic staff, non-academic staff, student bio-data, performance grades, and other relevant school information, thereby enhancing their efficiency and effectiveness in decision-making. This was determined to be the case. Stephen (2010) noted that the utilisation of computer resources in the educational system enhances instructional quality and streamlines administrative operations in public secondary schools. This constituted the outcome of his study.

A study conducted by Ibrahim, et al. (2016) at the University of Maiduguri in Nigeria revealed that the institution is ICT-driven, and the use of word processing for document preparation has significantly improved administrative activities within the system. Kingsley (2013) performed a survey including forty principals and one hundred twenty form teachers across forty private secondary schools in Ghana, revealing that Microsoft Word is the most frequently utilised program. He discovered that utilising a school computer for typesetting conserves time and financial resources while also expediting administrative processes.

Bassey and Otu (2016) obtained data from a sample of 129 teachers and 43 principals in the Eket Senatorial District of Akwa Ibom State, Nigeria. The researchers concluded that the availability of information and communication technology (ICT) facilities significantly impacts the administrative performance of secondary school administrators in the study area. Kayode, et al. (2019) determined through their research and analysis that the accessibility of information and communication technology (ICT) resources, professional development training, and limitations significantly correlate with the effective utilisation of ICT and staff job performance.

Napper (2014) examined the influence of ICT implementation in post-compulsory education in the United Kingdom, focussing on teachers' practices concerning visual aids and the effectiveness of text, images, and visuals in improving lecturers' productivity. He accomplished this by examining educators' methodologies about visual aids and the efficacy of text, visuals, and imagery. The study's findings indicate that a considerable proportion of



post-compulsory educators had not been trained in the development and application of visual aids during their first teacher training. The researcher found that a well-designed and efficiently executed ICT strategy can enhance lecturers' productivity. A separate study found that educators utilising technology are more inclined to: a) engage in collaborative work for extended periods; b) participate in project-based instruction more frequently; c) generate writing of superior quality and length; d) attain enhanced access to information; e) refine their research analysis capabilities; and f) allocate more time to digital homework. Research indicates that the integration of technology at the beginning of each class session assisted lecturers in sustaining focus and remaining on goal (Clotfelter, et al. 2021).

Umoru and Oluwafemi (2019) did a study examining the impact of scheduled instruction on the productivity of professors in Oyo State, Nigeria. The investigation was guided by three research questions, and two hypotheses were tested at a significance level of 0.05. A quasi-experimental approach with unequal pre-test and post-test groups was employed for the study. Analysis of covariance (ANCOVA) was conducted to evaluate the hypotheses, while the mean was employed in the data analysis about the research issues. The data indicate that utilising a programmed instruction technique significantly influenced the productivity levels of lecturers.

It is regrettable that numerous staff workers at Nigeria's tertiary institutions lack fundamental computer skills in this day of modern technology (Idowu, et al. 2017). The inadequate ICT literacy among academic staff constitutes a significant barrier to their effective use of ICT for conducting courses. An examination into computing abilities and the application of computing systems in education was done, and the findings were examined. The research findings indicate that just eight (8) persons could run the computer systems independently. Only four have published internationally via the Internet, whereas twenty-six have obtained pertinent reference materials for hardcopy publication. The majority have employed email services to read and send both personal and academic correspondence. The findings underscore the imperative of equipping lecturers with online training to enable them to undertake valuable studies and research, and disseminate their results in international forums (Adeyemi & Mary, 2013). A significant number of instructors in Nigeria's tertiary institutions have never utilised a computer, resulting in considerable discomfort when confronted with new technology and its accompanying terminology (Ajegbelen, 2016).

Idowu et al. (2017) examined the implementation of information and communications technology (ICT) in the educational environments of colleges of education in Benue State, Nigeria. The research aimed to accomplish the following objectives: to assess the library's effectiveness in meeting teachers' ICT needs; to examine the types and quality of available ICT at the college; to analyse their usage rates; and to investigate the measures taken by the librarian to promote awareness of the library's audio-visual resources. To clarify the necessary information, two distinct sets of questionnaires were administered to the staff and lecturers. The researcher visited the college to conduct observations and distribute the questionnaire. Data were gathered using a questionnaire and observations conducted by the researcher. Ultimately, it was concluded that the college's repository of information and communication technology resources were enough. The college's instructors infrequently utilise diverse ICT-based educational resources. The lecturers utilise the chalkboard infrequently as a visual assistance in their presentations. The implementation of information



and communications technology (ICT) in the college is impeded by several issues, including unavailability, insufficient supporting infrastructure, and human factors. They concluded that a significant correlation exists between the availability of information and communication technologies (ICT), the utilisation of ICT, and the job performance of lecturers.

The objective of the research was to ascertain the staff-to-computer ratio. Five distinct departments were under discussion. In four of the five departments, the staff-to-computer ratio is notably low, reaching as low as 1:5, indicating one computer for every five employees. The optimal ratio of teachers to computers in education should be one to one, as this would enable educators to effectively utilise information and communication technology (ICT) resources. Regrettably, now, no university in Nigeria maintains this optimal ratio (Adeyemi & Mary, 2013).

Bongotons and Onyenwe (2010) conducted a study on the accessibility and sufficiency of information and communication technology (ICT) resources in Nigeria's teacher education programs. A descriptive survey research methodology was selected, and a tool specifically designed for educators (Lecturers and Instructors) was employed in the study. The study revealed that educational institutions were deficient in information and communications technology (ICT) resources, the curriculum lacked pedagogical considerations, and teacher education was insufficient in multimedia-related conceptual and technical skills, adversely affecting lecturer productivity.

A study conducted by Agboze, et al. (2012) in universities within Nigeria's South-South and South-Eastern geopolitical zones revealed that the utilisation of ICT resources in instructional delivery was limited due to various constraints. The limits encompass a deficiency of competent personnel proficient in multimedia equipment application and an inadequacy of multimedia facilities and infrastructure inside the university, which has adversely impacted the country.

It can be inferred that ICT facilities may enhance the job performance of academic staff. This study will examine the relationship between the availability of ICT facilities and the job performance of academic staff in universities in Southwest Nigeria.

### **Materials and Methods**

The study adopted a descriptive survey research design, leveraging its wide scope to enable generalisation across the South West, Nigeria. The population consisted of 8,724 academic staff from public universities in Lagos, Ogun, Oyo, Osun, Ondo, and Ekiti states. A multi-stage sampling technique was used to select a sample of 1,320 participants, comprising 1,200 academic staff and 120 Heads of Departments (HODs) across six universities. Three states were selected randomly in the first stage, followed by stratified random sampling to choose one federal and one state university from each state. Subsequently, 20 academic departments per institution were stratified, and staff were proportionally sampled, while HODs were purposively included to evaluate staff job performance.

Two instruments were employed for data collection: The Materials Resource Situation Questionnaire (MRSQ) and the Academic Staff Job Performance Questionnaire (ASJPQ). The MRSQ included items on instructional materials and ICT facilities, rated on a 4-point Likert scale from "Strongly Agree" to "Strongly Disagree." The ASJPQ assessed job performance in teaching, research, and community service through a 5-point scale ranging from "Excellent" to "Poor." Both instruments featured sections on respondent demographics and specific



performance metrics. Validity was ensured through expert reviews, refining the instruments for clarity and relevance.

Reliability was tested using the test-retest method, administered to 40 academic staff and 4 HODs in two excluded universities. Pearson's Product Moment Correlation yielded reliability coefficients of 0.81 for the MRSQ and 0.89 for the ASJPQ, indicating strong reliability. Data collection was facilitated by six research assistants, ensuring a high response rate through direct delivery and recovery methods after obtaining university management consent.

Data analysis involved both descriptive and inferential statistics. Frequencies, percentages, means, and standard deviations were used to answer research questions, while Pearson's Product Moment Correlation tested hypotheses at a 0.05 significance level. This robust methodological approach ensured the collection of reliable data to explore the relationship between resource situations and academic staff performance effectively.

## Results

**Hypothesis 1:** There is no significant relationship between instructional materials situation and academic staff job performance

**Table 1: Relationship between resource instructional materials situation and academic staff job performance**

Variables	N	Mean	Stand Dev	r-cal	P-value
Instructional Materials Situation	1153	9.07	1.39	0.638*	0.000
Job Performance	1153	85.05	5.56		

\*P<0.05

Table 1 showed that the r-cal value of 0.638 is significant at 0.05 level of significance because the P-value (0.000) < 0.05. The null hypothesis is rejected. This implies that there is a significant relationship between instructional materials situation and academic staff job performance in Southwest Nigerian Universities.

**Hypothesis 2:** There is no significant relationship between ICT facilities situation and academic staff job performance

**Table 2: Relationship between ICT Facilities situation and academic staff job performance**

Variables	N	Mean	Stand Dev	r-cal	P-value
ICT Facilities Situation	1153	12.24	2.25	0.412*	0.000
Job Performance	1153	85.05	5.56		

\*P<0.05

Table 2 showed that the r-cal value of 0.412 is significant at 0.05 level of significance because the P-value (0.000) < 0.05. The null hypothesis is rejected. This implies that there is a significant relationship between ICT facilities situation and academic staff job performance in Southwest Nigerian Universities.

## Discussion

The study further revealed that there was a significant relationship between instructional materials situation and academic staff job performance. The significant relationship recorded between instructional materials situation and academic staff job performance suggests that



the availability, accessibility, and quality of instructional resources directly impact the effectiveness of academic staff on their job. In line with this finding, Agha (2014) found that availability of instructional materials will significantly contribute to an improvement in staff performance on the job. Akuegwu and Nwi-ue (2013) found that the most potent index for assessing and evaluating the standard and quality of the academic institutions is through a close examination of the available infrastructural facilities provided for effective teaching and learning processes in the universities.

The implication of this finding is that institutions investing in and maintaining robust instructional materials contribute positively to the overall performance of academic staff. Adequate access to relevant teaching tools and resources can enhance the quality of instruction, leading to improved student outcomes and satisfaction. On the contrary, a lack of sufficient instructional materials may hinder the ability of academic staff to deliver high-quality education, potentially affecting student learning experiences and academic achievements. Therefore, addressing the instructional materials situation is crucial for optimizing academic staff job performance and fostering a conducive learning environment.

It was revealed that there was a significant relationship between ICT facilities situation and academic staff job performance. The significant relationship between ICT facilities and academic staff job performance suggests that the availability and quality of Information and Communication Technology (ICT) resources directly impact the efficiency and effectiveness of academic staff on their job. In line with this finding, Kayode, et al (2019) found that the availability of information and communication technology (ICT) facilities have a significant relationship to both the efficient use of ICT and the job performance of staff. This implies that a well-equipped ICT infrastructure can enhance teaching, research, and administrative tasks, leading to improved overall job performance among academic staff. It underscores the importance of investing in and maintaining up-to-date ICT facilities in educational institutions, as they play a crucial role in supporting the modern demands of teaching and research. Additionally, institutions with robust ICT facilities may have a competitive advantage in attracting and retaining qualified academic staff, contributing to the overall success and reputation of the educational institution.

### **Conclusion**

It was concluded that instructional materials and ICT facilities were determinants of academic staff job performance in universities.

### **Recommendations**

Based on the findings of this study, the following recommendations were made

1. The university should continue to prioritize instructional materials, but also ensure regular updates and diversification to cater to various learning styles in order to improve the job performance of the academic staff.
2. The university management should invest in upgrading ICT facilities to align with modern educational requirements, promoting digital literacy and interactive learning for better job performance of the academic staff.



**REFERENCES**

- Akpan, C. P, Archibong, I. A. & Undie, J.A.(2014). Lecturers' access to research fund in Nigerian universities: challenges and strategies for improvement.
- Asiyai, R. F. (2017). Challenges of quality in higher education in Nigeria in the 21st century. Online publication. Available at <https://www.wathi.org> accessed on April 11, 2022.
- Bassey, T. (2013). Information technology and principals' effectiveness. *Scientific Research and Essay*, 1 (2), 54-56.
- Bassey, V. O., & Otu, E. S. (2016). Resource Situation and Administrative Effectiveness Of Secondary School Principals in Eket Senatorial District Of Akwa Ibom State, Nigeria. *International Journal of Academia*, 1(1), 285-295.
- Bello, T. O. (2011). Public-Private Partnership, Infrastructural Development and Academic Goals Achievement in Nigerian Universities. A Seminar paper presented at University of Ilorin.
- Bringle, R. J. (2019). Barriers to academic staff participation in community service. *Journal of Higher Education*, 7(8), 46 – 78
- Clotfelter, C.T., Rothschild, M. & Paserman, M.D. (2021). Resource Allocation in Higher Education: The Effects of Research and Teaching Quality on Faculty Compensation. *Journal of Public Economics*, 7(7), 78 – 89
- Ibrahim, I., Suleiman, 1. & Mustapha, U. (2016). Digitalization and school administration in Nigeria. *Educational Management Review*, 7(2), 80-93.
- Idowu, A., Esere, M., & Iruloh, B. R. (2017). Computer Accessibility, Usage and Lecturers' Perception of Innovative Ict based Assessment in a Nigerian University *Sustainable Transformation in African Higher Education* (pp. 215-226): Springer.
- Kayode, A. E., Irele, A. O., Janet, A. F., & George-Kayode, B. (2019). ICT for Effectiveness and Job Performance of Staff in the Universities in Nigeria. *Textila International Journal of Academic Research*, 19(2), 1-9.
- Kingsley, D. (2013). Experiential learning and its impact on students' attitudes toward youth with disabilities. *Journal of Experiential Education*, 38(2), 129-143.
- Manir, A. K. (2019). Problems, challenges and benefits of implanting e-learning in Nigerian universities. *International Journal of emerging technologies in learning*, 4(1), 66-69.
- Nwagwu, L. (2016). Status of technologies in business education departments of Tertiary Institutions in Ebonyi State for effective integration of electronic learning. *British Journal of Education*. 4(4), 49-59.



- Olayanju, T.K. &Asogwa, A.N. (2010). Competency-improvement needs of secretaries of higher institutions in information and communication technology for effective office work performance. *Multidisciplinary Journal of research Development*, 15(3), 1-12.
- Oyedeji, N.B. (2012). *Principles and practices of educational management*. Lagos: ARAS Press.
- Udu, L.E. & Nkwede, J.O. (2014). Tertiary Education Trust Fund Interventions and Sustainable Development in Nigerian Universities: Evidence from Ebonyi State University, Abakaliki. *Journal of Sustainable Development*, 7(4), 191-205
- Visscher. A.J. & Wild, P. (2014). The potential of information technology in support of teachers and educational managers managing their work environment. *Education and Information Technologies*, 2(4), 263-274.

### Cite this article:

**Author(s)**, AKINYEMI, Tolulope Francisca (Ph.D), (2024). "Instructional Materials and ICT Facilities Situation as Correlates of Job Performance of Academic Staff in Southwest Nigerian Universities", **Name of the Journal:** Commonwealth Journal of Academic Research, (CJAR.EU), P, 47-57. DOI: <http://doi.org/10.5281/zenodo.14543639> , Issue: 12, Vol.: 5, Article: 4, Month: December, Year: 2024. Retrieved from <https://www.cjar.eu/all-issues/>

### Published by



AND

*ThoughtWares Consulting & Multi Services International (TWCMSI)*

