

COMPUTER-BASED TOOLS AND LECTURERS' JOB PRODUCTIVITY IN OSUN STATE COLLEGES OF EDUCATION

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Abstract

This study investigated Computer-Based Tools and Lecturers' Job Productivity in Osun State Colleges of Education. The population of the study consisted of 362 lecturers, and the sample for the study comprised 193 lecturers using simple random sampling techniques. An adapted instrument, the Computer-Based Tools and Lecturers' Job Productivity Questionnaire (CBTLJPQ), was used in the study. To ascertain face and content validity, the instrument was given to an expert who scrutinized the items and the instrument. Necessary modifications were made before the instruments were administered. To ensure the reliability of the instrument, a pilot test was conducted. The instrument was administered twice within an interval of two weeks, and the data obtained were analyzed using percentage scores and Pearson Product-Moment Correlation (PPMC). A reliability coefficient of 0.76 was obtained, which was sufficient to consider the instruments reliable. All hypotheses were tested at the 0.05 level of significance. The findings revealed that the availability of computer-based tools in Colleges of Education in Osun State was moderate. The findings also showed that there was a significant positive relationship between computer-based tools and lecturers' job productivity in colleges of education in Osun State ($r=0.867$, $p<0.05$). The positive relationship means that good usage of computer-based tools would yield improvement in lecturers' job productivity. Moreover, the study revealed there was a significant positive relationship between access to computer-based tools and lecturers' job productivity in colleges of education in Osun state ($r=0.768$, $p<0.05$). Based on the findings of this study, the following recommendations were made: The government should make sure the required infrastructure is put in place to provide a continuous electricity supply, which is needed to drive computer-based tools in schools. For lecturers to be effective, tertiary institution managements should make sure that there is a sufficient supply of computer-based tools and resources that are easy to use.

Keywords: Computer-based tools, Lecturers' Perception, Utilization, and Job Productivity.

INTRODUCTION

Today, the quality of education and teaching pedagogy of learners is hinged on the levels of lecturers' job productivity in colleges of education. Lecturers, being important

personnel in the academic system, have an important role to play in ensuring that great thinkers emerge, tomorrow's future experts are produced, and that learners sufficiently acquire knowledge related to their various professions. Investigating the factors that can be used for

making lecturers productive can include their teaching prowess, subject mastery, and capacity to gear up and engage students well in learning as higher education develops in breadth and bounds. The presence of productive lecturers is essential to students' experience in their learning output as well as the success of the higher institution; dwelling on it will not be a waste of time.

Lecturer productivity, according to Bizimana (2022), is the inborn capacity of a lecturer to embrace appropriate teaching methods and develop systems to encourage students' acquisition of additional understanding, ideas, abilities, and capabilities, which, as a result, leads to the expected learning output. Computer-based tools are vital for giving active lecturers accessibility and interests (Adeyeye et al. 2022). The way a lecturer views the use of computer-based tools is germane to its successful incorporation in the classroom by both giving and receiving parties, that is, the lecturers and the students.

The positive or negative response a lecturer gives to the usage of computer-based tools has a lot to tell as to whether or not education will be successful (Cheng & Yeh, 2019). Researchers have established the fact that lecturers who have an inner drive for ICT tools enjoy it more in the classroom, which results in increased learning evidence (Prestridge, 2017). However, the lecturers who display less interest toward integrating ICT use computer-based tools only on a few occasions, which impede students' ability to gain something worthwhile in the learning environment. As observed, a plethora of factors are responsible for unfriendly lecturers' display and attitude towards computer-based tools. Such factors include lecturers' teaching beliefs, level of ICT exposure, and their perception of the value of ICT resources in learning experience (Al-Mutairi, 2020).

Lecturers who have deep computer knowledge and pedagogical assurance and certainty most times view the incorporation in teaching and learning positively compared to lecturers with absence of these attributes. Students' assimilation of content in the classroom is sometimes anchored on the way lecturers view computer-based tools, which can have a deep influence over how well students learn. Positive disposition towards computer tools integration is associated with more effective use of these resources by lecturers, which in turn boosts learners' motivation, attachment, and final results (Lai & Law, 2018). But, in reverse, lecturers who exhibit a poor attitude towards the usage of computer-based tools typically adopt obsolete teaching techniques, which might not be highly influential to draw students' interest or encourage them to sit, learn, and understand what is being learnt in the classroom.

Lecturers, in discharging classroom rules and guidelines, need productivity in their work schedule. The length of teaching effectively at times is an outcome of the lecturer's productivity. The productivity of a lecturer cannot be separated from the main focus of education if the purpose of education is to be realized. It is the combination of various measures imbued by a lecturer, as well as his inherent abilities is good to describe the term lecturer productivity. The importance of a lecturer's productivity cannot be overstated in a classroom setting where less attention is given to it; students will be seen performing below expectations in their studies, and that will hamper the achievement of academic goals (Alqahtani & Al-Shammari, 2020).

Adu (2021) revealed that lecturers perform essential functions and duties. It is generally believed that a nation's development might be retarded if the quality of its teachers is low. The lecturer exerts a great impact on students' academic lives. Setyaingsih and Herfina (2024)

asserted that the lecturer's work effectiveness is an individual ability to come up with qualitative outcomes based on set standards. At the colleges of education in Nigeria, ICT resources, such as computers and the internet, are mostly scarce (Nwosu, 2022).

Nevertheless, computer tools and resources have had a significant influence on the history of growth and development; their existence as well as global spread due to their rapid evolution since the middle of the 18th century, has led to convergence and pervasiveness. Its functions significantly affect every aspect of human activity. The use of computers in technological advancement has certainly impacted teaching, learning, and research. According to Muinde (2021), technology is the scientific knowledge to provide practical business solutions through ongoing research and innovations.

There has been a move away from the traditional teacher-centered methods to a more student-centered learning. According to Ike (2022), it was observed that there is poor usage of computer-based resources in the academic setting owing to a low opinion of its adoption by lecturers. This has a significant effect on the way jobs are executed in terms of their efficiency and effectiveness in teaching, interactions, student records, research, studies, and publications. Computer use in education has become inevitable as a result of technological advancement. Kolan & Dzandza (2018) emphasize that effective use of computer technology resources demands not only having the needed tools available on ground, but also that attention be paid to their maintenance. These, along with supplementary devices including printers, multi-media projectors, and scanners.

However, Mahande and Malago (2019) find that inadequate technological infrastructure, unresolved software issues, and lecturer access

constraints are all limiting factors resulting in poor utilization of computer tools. According to Adu & Olatomide (2021), many Nigerian lecturers are poorly trained to incorporate technology into the classroom. They discovered that lecturers lacked proper access to the required technology and software, as well as proper training and technical assistance. Similar to this, Adelokun & Adu (2021) found that some Nigerian lecturers were slow to integrate computers into their educational frameworks, claiming an absence of access in addition to having a limited chance to optimally utilize the needed equipment, as well as internet services. It should be noted that although computer tools can enhance lecturers' effectiveness at work, it is still arguable whether the utilization of these tools in the classroom is at its peak, capable of delivering excellent academic performance.

This research investigated computer-based tools and lecturers' job productivity in colleges of education in Osun State.

Statement of the Problem

In higher educational institutions, the quality of teaching and learning is increasingly being examined, with lecturer productivity coming top as a vital factor in determining students' academic performance and overall educational experience. Despite this, higher educational institutions are struggling with the challenge of ensuring that lecturers possess the necessary prerequisite skills, knowledge, and abilities to deliver quality instruction. Much concern has been raised about the impact of lecturers' usage of technology tools on their productivity in the classroom. It appears that one of the prevailing problems of lecturers' productivity is their inability to make good use of computer-based tools in the classroom.

Studies have shown and also indicate constant and regular concern that many lecturers are unable to successfully integrate computer tools

into teaching and learning processes to improve the quality of instruction. Even where these computer resources are abundantly available, lecturers' practical use of them is still limited, which raises questions about the true impact of ICT on educational outcomes. It is against this backdrop that the researcher investigated computer-based tools and lecturers' job productivity in colleges of education in Osun State.

Purpose of the Study

The study examined computer-based tools and lecturers' job productivity in Osun State College of Education. Specifically, it aimed to:

1. Identify the computer-based tools available in the Osun State Colleges of Education
2. Investigate the impact of the accessibility of computer-based tools on lecturers' job productivity in Osun State colleges of education.

Research Questions

The following research questions were proposed for the study.

1. What are the available computer-based tools in the Osun State Public Colleges of Education?
2. What is the level of accessibility of computer-based tools to lecturers for teaching processes in Colleges of Education in Osun State?

Hypotheses

The following hypotheses were formulated in the study.

H01: There is no significant relationship between the availability of computer-based tools and lecturers' job productivity in Osun State Colleges of Education.

H02: There is no significant relationship between access to computer-based tools and lecturers' job productivity in Osun State Colleges of Education.

METHODOLOGY

The descriptive design of the survey type was used in the study. Data was collected to illustrate the current situation regarding computer-based tools and lecturers' job productivity in Osun State College of Education. The population of the study consisted of 362 lecturers in the College of Education. The sample for the study comprised 193 lecturers using simple random sampling techniques. An adapted instrument, the Computer-Based Tools and Lecturer Job Productivity Questionnaire (CBTLJPQ), was used in the study. Face and content validity were adjudged by an expert from Osun State University who reviewed the instrument and scrutinized the items where necessary. The expert also gave constructive suggestions on the quality of items in the instrument. To ensure the reliability of the instrument, a pilot test was conducted. The instrument was administered twice within an interval of two weeks. A reliability coefficient of 0.76 was obtained, which was sufficient to consider the instruments reliable. The data obtained was analyzed using Pearson Product-Moment Correlation (PPMC). The two hypotheses were tested at the 0.05 level of significance.

RESULTS

Descriptive Analysis

Research Question 1: What are the available computer-based tools in Colleges of Education

Table 1: Availability of ICT Tools for Lecturers in Colleges of Education in Osun State

ICT Tools	HA (%)	AA (%)	MA (%)	IA (%)	NA (%)	Mean	SD	Rank
Internet	70	93	20	10	0	4.16	.808	1 st

	(36.3)	(48.2)	(10.4)	(5.2)	(0.0)			
E-mail	70	93	20	10	0	4.16	.808	1 st
	(36.3)	(48.2)	(10.4)	(5.2)	(0.0)			
PowerPoint is a type of presentation software	50	50	73	15	5	3.65	1.031	3 rd
	(25.9)	(25.9)	(37.8)	(7.8)	(2.6)			
Projector	40	50	73	20	10	3.47	1.090	4 th
	(20.7)	(25.9)	(37.8)	(10.4)	(5.2)			
Spreadsheet	40	50	73	20	10	3.47	1.090	4 th
	(20.7)	(25.9)	(37.8)	(10.4)	(5.2)			
Video Conferencing tools like Zoom, Google Meet.	40	50	73	20	10	3.47	1.090	4 th
	(20.7)	(25.9)	(37.8)	(10.4)	(5.2)			
Hardware, e.g., Hard Disc, RAM	30	50	35	57	21	3.06	1.271	5 th
	(15.5)	(25.9)	(18.1)	29.5)	(10.9)			
Learning Management Systems like digital libraries	40	40	30	53	30	3.04	1.393	6 th
	(20.7)	(20.7)	(15.5)	(27.5)	(15.5)			
Software e.g. spreadsheet	30	50	30	53	30	2.98	1.336	7 th
	(15.5)	(25.9)	(15.5)	(27.5)	(15.5)			
Laptop	30	40	40	53	30	2.93	1.315	8 th
	(15.5)	(20.7)	(20.7)	(27.5)	(15.5)			
Mean Average						3.67	1.04	

Legend: HA-Highly Available AA= Adequately Available MA= Moderately Available IA= Inadequately Available NA= Not Available SD= Standard Deviation

Table 4.2 presents the findings on ICT tools available to lecturers in Colleges of Education in Osun State. According to the results of the analysis, the results showed that in terms of internet accessibility, 36.3% of the respondents rated it highly available, 48.2% indicated adequately available, and 10.4% indicated moderately available, while 5.2% indicated inadequate availability. On average, the respondents indicated that access to the internet is high, with a standard deviation showing convergence around the mean (mean = 4.16, SD = 0.808). Software programmes have lower availability, with 15.5% rating them highly available, 25.9% adequately available, 15.5% moderately available, 27.5% inadequately available, and 15.5% not available, with a mean of 2.98 and a standard deviation of 1.336, indicating diverse opinions. Projectors are highly available with 20.7% adequately available 25.9%, moderately available 37.8%, inadequately available, 10.4%, and 5.2% not available, with a mean of 3.47 and a standard deviation of 1.090. Spreadsheet shows

moderate availability, with 20.7% highly available, 25.9% adequately available, 37.8% moderately available, 10.4% inadequately available, and 5.2% not available, with a mean of 3.47 and a standard deviation of 1.090.

Learning Management Systems such as Moodle have moderate availability, with 20.7% highly available, 20.7% adequately available, 15.5% moderately available, 27.5% inadequately available, and 15.5% not available, with a mean of 3.04 and a standard deviation of 1.393. In addition, video conferencing tools (e.g., Zoom, Google Meet) are moderately available, with 20.7% highly available, 25.9% adequately available, 37.8% moderately available, 10.4% inadequately available, and 5.2% not available, with a mean of 3.47 and a standard deviation of 1.090. E-mail is highly available, with 36.3% highly available, 48.2% adequately available, 10.4% moderately available, and 5.2% inadequately available, with a mean of 4.16 and a standard deviation of 0.808. PowerPoint is adequately available, with 25.9% highly available, 25.9% adequately available, 37.8%

moderately available, 7.8% inadequately available, and 2.6% not available, with a mean of 3.65 and a standard deviation of 1.031.

Besides, hardware (hard disc, RAM) has moderate availability, with 15.5% highly available, 25.9% adequately available, 18.1% moderately available, 29.5% inadequately available, and 10.9% not available, with a mean of 3.06 and a standard deviation of 1.271. Overall, the average mean of ICT tools available to lecturers in Colleges of Education in Osun State is 3.67, with a standard deviation of 1.04, which implies moderate availability of ICT tools with notable strengths in personal devices and communication tools, but gaps in specialised equipment like software.

To determine the level of availability of computer-based tools in Colleges of Education in Osun State, aggregate scores from items 1-20 on computer-based tools availability were

computed, yielding a mean value of 73.40 and a standard deviation of 19.57. Categorization of computer-based tools availability into low, moderate, and high levels was based on further analysis of the mean and standard deviation, with results subjected to descriptive statistical methods, including frequency counts and percentage distribution. The upper limit for low availability was obtained by subtracting the standard deviation from the mean score ($73.40 - 19.57 = 53.83$), while the lower limit for high availability was determined by adding the standard deviation to the mean score ($73.40 + 19.57 = 92.97$). Accordingly, computer-based tools availability was classified as follows: Low availability (20.00-53.82), Moderate availability (53.83-92.96), and High availability (92.97-100). The distribution of computer-based tools availability levels among lecturers in Colleges of Education in Osun State is presented in Table 2.

Table 2: Distribution of computer-based tools availability levels among lecturers in Colleges of Education in Osun State

ICT Tools Availability	Frequency	Percentage (%)
Low (20.00 – 53.82)	30	15.6
Moderate (53.83 – 92.96)	123	63.7
High (92.97 – 100)	40	20.7
Total	193	100

Table 2 captures the distribution of computer-based tools availability levels among lecturers in Colleges of Education in Osun State. The results reveal that the majority of lecturers (63.7%) experience a moderate level of computer tools availability, indicating that while digital resources are present, they may not be consistently accessible or fully integrated into institutional systems. A notable proportion (20.7%) reports high availability, suggesting

that some colleges have made substantial investments in computer-based infrastructures. Conversely, 15.6% of lecturers experience low availability, pointing to disparities that may hinder effective teaching and learning. These findings underscore the need for targeted improvements in computer-based tools provision to ensure equitable access and to promote optimal utilisation of digital resources across all institutions.

Research Question 2: What is the level of accessibility of computer-based tools to lecturers for teaching processes in Colleges of Education in Osun State?

To determine the level of accessibility of digital tools in Colleges of Education in Osun State, aggregate scores from items 1–10 of the computer-based tools and the Lecturers’ Job Productivity Questionnaire were computed,

yielding a mean value of 32.46 and a standard deviation of 12.72. Categorization of ICT tools accessibility into low, moderate, and high levels among college lecturers was based on further analysis of the mean and standard deviation, with results subjected to descriptive statistical methods, including frequency counts and percentage distribution. The upper limit for low accessibility was obtained by subtracting the standard deviation from the mean score ($32.46 - 12.72 = 19.74$), while the lower limit for high

accessibility was determined by adding the standard deviation to the mean score ($32.46 + 12.72 = 45.17$). Accordingly, computer-based tools accessibility was classified as follows: Low accessibility (10.00–19.74), Moderate accessibility (19.75–45.16), and High accessibility (45.17–50.00). The distribution of computer-based tools accessibility levels among lecturers in Colleges of Education in Osun State is presented in Table 3

Table 3: Accessibility of ICT Tools for Teaching Processes in Colleges of Education in Osun State

Items	SA (%)	A (%)	SD (%)	D (%)	U (%)	Mean	SD	Rank
My institution provides personal login access to online learning platforms.	45 (23.3)	45 (23.3)	40 (20.7)	43 (22.3)	20 (10.4)	3.28	1.31	1 st
Technical support for ICT-related issues is readily available when needed.	34 (17.6)	61 (31.6)	45 (23.3)	38 (19.7)	15 (7.8)	3.28	1.22	1 st
Lecturers are encouraged to use computer-based tools in lesson delivery.	50 (25.9)	40 (20.7)	45 (23.3)	38 (19.7)	20 (19.4)	3.28	1.34	1 st
My institution has policies that support the seamless adoption of computer-based tools.	50 (25.9)	40 (20.7)	45 (23.3)	38 (19.7)	20 (19.4)	3.28	1.34	1 st
ICT tools such as computers are easily accessible to lecturers.	40 (20.7)	50 (25.9)	40 (20.7)	43 (22.3)	20 (10.4)	3.26	1.28	5 th
Lecturers can easily integrate computer-based tools into their teaching without barriers.	35 (18.1)	50 (25.9)	45 (23.3)	48 (24.9)	15 (7.8)	3.23	1.21	6 th
The college provides adequate training on how to use computer-based tools effectively.	40 (20.7)	45 (23.3)	45 (23.3)	43 (22.3)	20 (19.4)	3.21	1.29	7 th
The availability of computer-based tools in classrooms is sufficient for interactive learning.	40 (20.7)	45 (23.3)	45 (23.3)	43 (22.3)	20 (19.4)	3.21	1.29	7 th
There are provisions for lecturers to access computer-based tools when needed.	40 (20.7)	45 (23.3)	45 (23.3)	43 (22.3)	20 (19.4)	3.21	1.29	7 th
Computer-based tools are accessible for both in-person and online teaching methods.	40 (20.7)	45 (23.3)	45 (23.3)	43 (22.3)	20 (19.4)	3.21	1.29	7 th
Mean Average						3.25	1.29	

Table 3 presents the findings on the accessibility of ICT tools in Colleges of Education in Osun State. According to the results of the analysis, 20.7% of the respondents indicated strongly agree on the accessibility of

ICT tools such as computers and projectors, 25.9% indicated agree, 22.3% disagreed, 20.7% strongly disagreed, and 10.4% remained undecided. On average, respondents rated the accessibility of computers and projectors as

moderate, with a standard deviation of 1.285, showing variation in responses (mean = 3.26).

Regarding the provision of personal login access to online learning platforms and digital libraries, 23.3% strongly agreed, 23.3% agreed, 22.3% disagreed, 20.7% strongly disagreed, and 10.4% were undecided. This item recorded a mean of 3.28 and a standard deviation of 1.310, showing a moderate spread, which implies some differences in how respondents experience access to digital platforms.

On the availability of technical support for ICT-related issues, 17.6% strongly agreed, 31.6% agreed, 19.7% disagreed, 23.3% strongly disagreed, and 7.8% were undecided. The mean was 3.28, while the standard deviation stood at 1.222, suggesting a slightly narrower dispersion compared to other items, indicating a more consistent view among respondents. Concerning the adequacy of training on computer-based tools, 20.7% strongly agreed, 23.3% agreed, 22.3% disagreed, 23.3% strongly disagreed, and 19.4% were undecided. The mean response was 3.21 with a standard deviation of 1.294, which implies moderate variability in opinions, possibly reflecting unequal training access across institutions.

The analysis further indicates that 25.9% of respondents strongly agreed that lecturers are encouraged and supported to use computer-based tools in lesson delivery, 20.7% agreed, 19.7% moderately disagreed, 23.3% strongly disagreed, while 19.4% remained undecided. On average, lecturers moderately feel encouraged and supported in ICT adoption (mean 3.28, SD 1.349). Regarding the sufficiency of computer-based tools in classrooms for interactive learning, 20.7% strongly agreed, 23.3% agreed, 22.3%

disagreed, 23.3% strongly disagreed, and 19.4% were undecided. The item recorded a mean of 3.21 and a standard deviation of 1.294, showing moderate dispersion and reflecting mixed access to classroom-based ICT infrastructure.

On the ease of ICT integration into teaching, 18.1% strongly agreed, 25.9% agreed, 24.9% disagreed, 23.3% strongly disagreed, and 7.8% were undecided. The mean score was 3.23, with the lowest standard deviation in the table at 1.217, which suggests that respondents' opinions were relatively consistent on this item. In response to the availability of provisions for lecturers to access ICT devices, 20.7% strongly agreed, 23.3% agreed, 22.3% disagreed, 23.3% strongly disagreed, and 19.4% were undecided. This item had a mean of 3.21 and a standard deviation of 1.294, indicating a moderate level of disagreement among respondents.

With respect to institutional policies supporting computer-based tools adoption, 25.9% strongly agreed, 20.7% agreed, 19.7% disagreed, 23.3% strongly disagreed, and 19.4% were undecided. The mean value was 3.28, and the standard deviation was 1.349, reflecting a relatively high variability in responses. Finally, regarding accessibility of computer tools for in-person and online teaching, 20.7% strongly agreed, 23.3% agreed, 22.3% disagreed, 23.3% strongly disagreed, and 19.4% were undecided. The item had a mean of 3.21 and a standard deviation of 1.294, indicating a moderate spread of opinions. The average mean score for computer tools accessibility among lecturers is 3.25, with a standard deviation of 1.291, indicating a moderate level of computer tools accessibility in Colleges of Education in Osun State.

Table 4: Distribution of computer-based tools accessibility levels among lecturers in Colleges of Education in Osun State

Computer-Based Tools Accessibility	Frequency	Percentage (%)
Low (10.00 – 19.74)	20	10.4

Moderate (19.75 – 45.16)	133	68.9
High (45.17 – 50.00)	40	20.7
Total	193	100

Table 4 presents the distribution of computer-based tools accessibility levels among lecturers in Colleges of Education in Osun State. The findings reveal that a majority of lecturers (68.9%) have moderate access to computer tools, suggesting that while computer-based resources are available, their utilization may be constrained by factors such as inadequate infrastructure, limited technical training, or insufficient institutional support. A smaller proportion (20.7%) reported high accessibility, indicating that some institutions have

successfully integrated computer-based tools into their teaching environments. Conversely, 10.4% of lecturers experience low accessibility, highlighting a segment of the academic workforce that may be underserved and requiring targeted interventions to bridge the digital gap. These results emphasize the need for strategic policies and initiatives aimed at improving ICT access across all Colleges of Education in the state, thereby enhancing teaching quality and overall instructional effectiveness.

Hypotheses Testing

Hypothesis One: There is no significant relationship between the availability of computer-based tools and lecturers’ job productivity in colleges of education in Osun State.

Table 5: Correlation between Availability of Computer-Based Tools and Lecturers’ Job Productivity

Variables	N	Mean	Std. D	df	R	p-value
Availability of Computer-Based Tools	193	73.40	19.57	191	.867*	.000
Lecturers Job Productivity	193	32.74	12.74			

* P < 0.05

Table 5 presents the Pearson correlation analysis between the availability of computer tools and lecturers’ effectiveness. The result shows that $r(191) = 0.867$, $p = 0.000$ at the 0.05 level of significance. Since the p-value is less than 0.05, the null hypothesis is rejected. This indicates a very strong, positive, and statistically significant relationship between the

availability of computer-based tools and lecturers’ job productivity. This finding implies that when computer-based tools are adequately available to lecturers in Colleges of Education in Southwest Nigeria, there is a corresponding substantial improvement in their teaching quality, research output, student engagement, and overall instructional effectiveness

Hypothesis Two: There is no significant relationship between access to computer-based tools and lecturers’ job productivity in Colleges of Education in Osun State.

Table 6: Pearson Correlation Analysis between Access to Computer-Based Tools and Lecturers’ Job Productivity

Variables	N	Mean	SD	df	R	p-value
Computer-Based Tools Accessibility	193	32.45	12.71	191	.768*	.000
Lecturers Job productivity	193	32.75	12.74			

Table 6 presents the analysis of access to computer-based tools and lecturers' job productivity. The results indicate a strong positive correlation ($r = .768$, $p < .05$) between the two variables. This suggests that increased access to computer tools simultaneously enhanced lecturers' job productivity in teaching and academic activities. Hence, the null hypothesis that there is no significant

DISCUSSION OF FINDINGS

It was discovered that computer-based tools in Public Colleges of Education in Osun State were moderate. The findings also showed that there was a positive significant positive relationship between computer-based tools and lecturers' job productivity. Lecturers who possess strong ICT skills and pedagogical convictions are more likely to see computer-based tools integration positively than lecturers who lack these qualities. The way lecturers view the incorporation of computer-based tools in classes can have a deep influence on how well students learn. Positive attitudes toward computer-based tools are associated with more effective use of these resources by lecturers, which raises student motivation, engagement, and learning outcomes (Lai & Law, 2018). Moreover, the findings also revealed a positive significant positive relationship between access to computer-based tools and lecturers' job productivity in Osun State. The attitude of the lecturer has a big influence on whether computer integration in education will succeed or fail (Cheng & Yeh, 2019). Studies have shown that lecturers who are passionate about computer tools integration are better at incorporating it into their lessons, which leads to improved learning outcomes (Prestridge, 2017). However, lecturers who have an unfavorable attitude toward integrating computer tools use these tools less frequently, which hinders students' ability to learn. Several factors can affect a lecturer's attitude toward computer tools. These factors include lecturers'

relationship between access to computer-based tools and lecturers' job productivity is rejected because the p-value of 0.000 is less than the 0.05 level of significance. Thus, access to computer tools plays a crucial role in improving teaching methodologies, student engagement, and overall instructional effectiveness among lecturers in Colleges of Education in Osun State.

pedagogical beliefs, the lecturer's degree of ICT proficiency, their perception towards the value of computer resources in learning experience, and their perceived barriers to adopting ICT tools (Al-Mutairi, 2020). Moreso, at the colleges of education in Nigeria, computer-based tools, such as laptops and the internet, are mostly scarce. (Nwosu, 2022).

CONCLUSION AND CONCLUSION

Conclusion

Based on the findings of the study, it was concluded that the availability and use of computer-based tools in Colleges of Education in Osun State was moderate, which had a limiting effect on lecturer productivity. It can also be concluded that computer-based tools influence lecturers' effectiveness in Public Colleges of Education in Osun State.

Recommendations

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

1. The government should make sure the required infrastructure is put in place to provide a continuous electrical supply, which is needed to drive computer tools usage in schools.
2. For lecturers to be effective, management of tertiary institutions should make sure that there is a sufficient supply of computer tools and resources that are easy to use.

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