

EXTENT OF UTILIZATION OF ONLINE LEARNING PLATFORMS AMONG
LECTURERS IN THE FACULTY OF EDUCATION, ENUGU STATE
UNIVERSITY OF SCIENCE AND TECHNOLOGY (ESUT)

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Abstract

This study examined the extent to which lecturers in the Faculty of Education, Enugu State University of Science and Technology (ESUT), utilize online learning platforms in their instructional practices. The study was motivated by the increasing global integration of technology in education and the growing concern about the underutilization of digital learning tools in Nigerian universities. A descriptive survey research design was adopted. The sample size for this study will consist of 99 lecturers in faculty of education, ESUT. A structured questionnaire titled Online Learning Platform Utilization Questionnaire (OLPUQ) was developed by the researcher, validated by experts, and yielded a reliability coefficient of 0.76 for cluster A using Kuder-Richardson (KR-20) formula and reliability coefficient of 0.81 for cluster B using Cronbach Alpha. The copies of the questionnaire were distributed by the researcher with the help of three research assistants. Data collected were analyzed using Statistical Packages for Social Science SPSS version 20 and the statistical tools employed are frequency, percentage, mean and standard deviation to answer research questions while chi-square and t-test statistical tools were used to test the null hypotheses. The findings revealed that lecturers in Faculty of Education, ESUT lecturers show commendable awareness of basic online platforms. Also, as revealed by the finding that lecturers in the Faculty of Education at ESUT utilize online learning platforms to a low extent is indicative of a systemic challenge that goes beyond individual reluctance. Based on the findings of the study, the researcher recommends among other that Faculty of Education should implement continuous professional development programs focusing on digital literacy and pedagogical integration of both common and advanced online learning platforms. These should be practical and context-driven, the university administration should collaborate with ICT providers to improve internet connectivity and access to digital resources, especially in faculty buildings and libraries.

Keywords: Online learning platforms, utilization, lecturers, educational technology, higher education, ESUT.

Introduction

The value of education in human development has been extensively documented, with education catalyzing national and human capital development. Education is a means of self-development that is passed down from generation to generations through learning, information and skills acquisition. The value of

education in a country's economic, social, and moral development cannot be over emphasized. Education is an ever dynamic and evolving process. As a dynamic process, it develops the child according to the changing situations and time and as an evolving process it moves in a regular progression through a system.

Over time this system of education has also evolved from teacher centered

teaching and learning process in the classroom, where the teacher is assumed to be the dispenser of knowledge to a learner-centred approach, where the learner is the focus of the process while the teacher is a facilitator of knowledge. The learners in this approach are allowed to discover knowledge on their own through the careful guidance of the teachers. In the 21st century, teaching and learning have evolved largely from the traditional classroom to the virtual classroom. This massive shift from the traditional classroom to the use of online learning platforms is fast gaining ground around the world and higher institutions in particular. Many universities now adopt e-teaching and e-learning to complement face-to-face instruction (Owo & Udoka, 2021). The adoption of these online learning platforms for study is to keep learning going, while staying safe (Teke, Zor & Timur, 2017). Learning from the comfort of your home at any time of the day will not only allow learners to learn comfortably but also, make them learn and understand better. Also, the teachers in this case, lecturers, could organise their teaching time as well as other things they would want to do for themselves both personally and professionally without any of them suffering. The lecturer could organize an online class for his students since he could not be physically present in the classroom due to issues beyond his control.

The global shift toward digital education has transformed teaching and learning practices in higher institutions. Online learning platforms such as Google Classroom, Zoom, Moodle, and Microsoft Teams serve as essential tools for promoting flexible, interactive, and learner-centered instruction (Olasina, 2021). The outbreak of COVID-19 further accelerated the adoption of these platforms across universities worldwide, as physical teaching became impracticable. According to UNESCO (2020), the rapid move to online education demonstrated both the potential and the

limitations of digital learning systems, particularly in developing countries.

In Nigeria, the National Universities Commission (NUC) has encouraged institutions to integrate e-learning tools as part of quality assurance mechanisms for teaching and learning (NUC, 2021). However, the level of adoption and utilization of these platforms varies across institutions due to challenges related to infrastructure, digital literacy, and institutional support (Ogunlade & Adelabu, 2022). Enugu State University of Science and Technology (ESUT), as a technology-oriented institution, is expected to play a leading role in this transformation. Yet, anecdotal evidence suggests that many lecturers in the Faculty of Education rely heavily on traditional teaching methods with limited engagement in digital platforms. Understanding the extent of utilisation of online learning platforms among lecturers in ESUT is therefore essential for improving teaching effectiveness and aligning with 21st-century educational demands.

Several Nigerian studies have examined related questions. Bello (2022) studied 322 lecturers and 1,491 students at the University of Ilorin, the researcher found out that awareness and use of learning management system platforms were low before the COVID-19 lockdown and rose sharply afterwards, with Zoom, Google Classroom, Google Meet, WhatsApp and YouTube dominating. Alimi (2018) surveyed 1,042 lecturers across Nigerian universities. They were aware of Google Apps for Education (74.1%) but generally not competent in using them, and their access was largely limited to their offices. Oladele et al. (2021) found a scarcity of online teaching and assessment tools and a clear need for training among lecturers in North-Central Nigeria. Oyefara et al. (2021) surveyed 1,325 middle-level lecturers in 12 south-western universities. Teaching-related ICT facilities were often unavailable or non-functional, and use was limited by inadequate training, poor infrastructure,

unreliable electricity and weak institutional policy. Owo and Udoka (2021), working in Rivers State, reported that universities lacked adequate digital facilities and that lecturers and students needed stronger digital skills. Ogunbodede et al. (2023) found high digital competence among lecturers in south-south Nigeria, but limited training opportunities and inadequate facilities.

These studies leave several gaps. First, none of them focuses on the Faculty of Education at ESUT. Second, most of the studies measure facilities, digital competence or a single suite of tools (Oyefara et al., 2021; Owo & Udoka, 2021; Ogunbodede et al., 2023; Alimi, 2018). They do not set awareness and extent of utilisation side by side across a broad range of platforms, including communication tools, LMS and assessment tools. Third, some studies combined lecturers and students (Bello, 2022) or relied on students' reports of lecturers' practice (Oyefara et al., 2021), so lecturers' own accounts are less clear. Fourth, the platforms were studied mainly in open and distance learning settings (Kadir, 2020), before COVID-19 (Alimi, 2018), or during the lockdown (Bello, 2022), which leaves routine use in conventional, campus-based faculties less well documented. Finally, the studies rarely consider the particular position of faculties of education, whose lecturers train future teachers and so shape how technology is used in schools. The present study addresses these gaps by examining lecturers' awareness and extent of utilisation of online learning platforms in the Faculty of Education, ESUT.

Purpose of the Study

The purpose of this study is to find out the awareness and extent of utilisation of online learning platform among lecturers in faculty of education, Enugu State University of Science and Technology, (ESUT). Specifically the study is to find out:

1. Awareness of online learning platforms among lecturers in the Faculty of Education, ESUT.

2. Extent of utilization of online learning platforms among lecturers in the Faculty of Education, ESUT.

Research Questions

The following research questions guided the study:

1. What is the awareness of online learning platforms among lecturers in the Faculty of Education, ESUT?
2. What is the extent of utilization of online learning platforms among lecturers in the Faculty of Education, ESUT?

Hypotheses

H₀₁. There is no significant difference in the mean responses of male and female lecturers in Faculty of Education, ESUT on their awareness of the online learning platform.

H₀₂. There is no significant difference in the mean responses of male and female lecturers in Faculty of Education, ESUT on the extent of utilization of online learning platform.

Research Method

The study adopted a descriptive survey design, suitable for gathering opinions and factual information from a specific population. According to Nworgu (2015), a descriptive survey is a design in which a group of people or items is studied by collecting and analysing data from a few of them, who are considered representative of the entire group. This design was appropriate for the present study because it allowed the researcher to describe lecturers' awareness and extent of utilisation of online learning platforms in the Faculty of Education, ESUT, from a representative sample of the lecturers. The study was carried out in Enugu State University of Science and Technology (ESUT). ESUT remains a major institution for higher learning in southeastern Nigeria, contributing to research, innovation, and manpower development. ESUT's main, permanent campus is located in Agbani, about 80 km east of Enugu city, Enugu State. The university's postal address is PMB

01660, Agbani, Enugu State, Nigeria, which also serves as its official postal code. The population of the study comprises of all the lecturers in faculty of education, Enugu State University of Science and Technology (ESUT). According to the data from the Academic Planning Office, ESUT has a population of 99 Lecturers in Faculty of Education. Therefore, since the population is small, the entire population of lecturers was used for the study.

The instrument used for the data collection was a structured questionnaire developed by the researcher titled Online Learning Platform Utilization Questionnaire (OLPUQ) which is simple, clear and specific with two sections, A and B. Section A, which collected demographic data. While the section B is made up of the questionnaire items developed to answer the two (2) research questions. The questionnaire items on research question 1 have yes and no response options while research question 2 has a four (4) point rating scale of Very High Extent (VHE) =4 points, High Extent (HE) =3 points, Low Extent (LE) = 2 points, and Very Low Extent (VLE) = 1 point for rating the responses of the respondents. To ensure the validity of the instrument, it was face-validated by three experts from the

Department of Mathematics and Computer Science Education at the Enugu State University of Science and Technology (ESUT). The reliability of the instrument was determined by conducting a pilot test among 10 lecturers outside the study population yielded a reliability coefficient of 0.76 for cluster A using Kuder-Richardson (KR-20) formula and reliability coefficient of 0.81 for cluster B using Cronbach Alpha. These values indicate high internal consistency. An introductory letter was issued to the researcher by the Head of Department. This is to ensure itch-free data collection process. The data collected were analysed using descriptive statistics (frequency, percentage, mean and standard deviation) for the research questions, while chi-square and t-test were used to test the null hypotheses at a 0.05 level of significance. The decision rule was that null hypotheses were rejected if the significance value (p) was less than 0.05, and retained if greater than 0.05, based on the SPSS output.

Results / Findings

Research question 1: What is the level of awareness of online learning platform among lecturers in Faculty of Education, ESUT?

Table 1: The frequency and percentage score of respondents on the level of awareness of online learning platform among lecturers in Faculty of Education, ESUT

SN	I am aware of;	YES	YES%	NO	NO%	DEC
1	Google classroom	66	66.7%	33	33.3%	HL
2	WhatsApp	91	91.9%	8	8.1%	HL
3	Zoom App	71	71.7%	28	28.3%	HL
4	E-mail	81	81.8%	18	18.2%	HL
5	X (formerly Twitter)	48	48.5%	51	51.5%	LL
6	Tiktok	10	10.1%	89	89.9%	LL
7	YouTube	72	72.7%	27	27.3%	HL
8	Canvas	33	33.3%	66	66.7%	LL
9	Google meet	68	68.7%	31	31.3%	HL
10	Moodle	30	30.3%	69	69.7%	LL
11	Google form	32	32.3%	67	67.7%	LL
12	Blackboard	38	38.4%	61	61.6%	LL

13	D2L Brightspace	18	18.2%	81	81.8%	LL
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Result in Table 1 answered research question one which sought to determine the level of awareness of online learning platform among lecturers in Faculty of Education, ESUT. The result revealed that lecturers in Faculty of Education, ESUT have high level of awareness of the following online learning platforms like; Google classroom, WhatsApp, Zoom App, E-mail, YouTube and Google meet with percentage score greater than 50% bench

mark set for the study. However, they possess low level of awareness of the following online platforms; X (formerly Twitter), Tiktok, Canvas, Moodle, Google form, Blackboard, and D2L Brightspace with percentage score less than 50% bench mark set for the study.

Research question 2: What is the extent of utilization of online learning platform among lecturers in Faculty of Education, ESUT?

Table 2: The mean and standard deviation scores on the extent of utilization of online learning platform among lecturers in Faculty of Education, ESUT

SN	I teach using;	MEAN	SD	DEC
14	Google classroom	1.77	0.92	LE
15	WhatsApp	1.91	0.93	LE
16	Zoom App	1.83	0.93	LE
17	E-mail	1.73	0.81	LE
18	X (formerly Twitter)	1.92	1.00	LE
19	Tiktok	2.09	1.06	LE
20	YouTube	2.10	1.08	LE
21	Canvas	1.78	0.89	LE
22	Google meet	1.86	0.90	LE
23	Moodle	1.82	0.92	LE
24	Google form	1.83	0.93	LE
25	Blackboard	1.94	0.87	LE
26	D2L Brightspace	1.82	0.90	LE
	Grand Mean	1.88	0.94	LE

Data in table 2 shows the mean response score of respondents on the extent of utilization of online learning platform among lecturers in Faculty of Education, ESUT. From the table, the lecturers disagreed to all the items with mean score less than 2.50 set for the study. The grand mean scores of 1.88 shows that to low extent lecturers in Faculty of Education, ESUT utilize online learning platforms for teaching. The standard deviations (SD) scores of 0.94

indicate low variability in their opinions. This suggests that there are consensuses among the opinions of the respondents as the extent of utilization of online learning platform among lecturers in Faculty of Education, ESUT.

H₀₁. There is no significant difference in the mean responses of male and female lecturers in Faculty of Education, ESUT on their awareness of online learning platform.

Table 3: Chi-square analysis on the mean responses of male and female lecturers in Faculty of Education, ESUT on their awareness of online learning platform

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Dec
Pearson Chi-Square	.442a	1	0.506			NS
Continuity Correction ^b	0.144	1	0.705			
Likelihood Ratio	0.461	1	0.497			
Fisher's Exact Test				0.581	0.362	
Linear-by-Linear Association	0.437	1	0.509			
N of Valid Cases	98					

Table 3 shows Chi-square analysis on the mean responses of male and female lecturers in Faculty of Education, ESUT on their awareness of online learning platforms. There was no significant association between participant gender and their awareness of online learning platforms, $\chi^2(1, N = 99) = .442, p = 0.506$ ($p > 0.05$). Therefore, the null hypothesis is not rejected

as stated. This means that there is no significant difference in the responses of male and female lecturers in Faculty of Education, ESUT on their level of awareness of online learning platform.

H₀₂. There is no significant difference in the mean responses of male and female lecturers in Faculty of Education, ESUT on the extent of utilization of online learning platform.

Table 4: Mean, SD and t-test analysis on the mean responses of male and female lecturers in Faculty of Education, ESUT on the extent of utilization of online learning platform

Gender	n	Mean	SD	t	df	Sig. (2-tailed)	Decision
Female	75	2.05	0.23	0.911	96	0.364	NS
Male	23	2.00	0.30				

Data in Table 4 shows that there is no significant difference in the mean responses of male and female lecturers in Faculty of Education, ESUT on the extent of utilization of online learning platforms. With male lecturers ($M = 2.05, SD = 0.23$) and female lecturers counterpart ($M = 2.00, SD = 0.30$), $t(96) = 0.911, P = .364$ ($P > 0.05$). therefore, there is no significant difference in the mean responses of male and female lecturers in Faculty of Education, ESUT on the extent of utilization of online learning platforms.

Discussion of Findings

The first research question sought to determine lecturers' level of awareness of online learning platforms in the Faculty of Education, Enugu State University of Science and Technology (ESUT). The

findings show that lecturers are aware of Google Classroom, WhatsApp, Zoom, e-mail, YouTube and Google Meet. They are not aware of X (formerly Twitter), TikTok, Canvas, Moodle, Google Forms, Blackboard and D2L Brightspace as tools for teaching. This suggests that lecturers are comfortable with mainstream communication and content-sharing platforms but unfamiliar with dedicated Learning Management Systems (LMS) such as Moodle, Canvas, Blackboard and D2L Brightspace, and with assessment tools such as Google Forms. These platforms are more complex, but they are designed to support structured learning, assessment, learner analytics and curriculum management, which makes them central to meaningful digital pedagogy.

This pattern is consistent with Bello (2022), who found that awareness of LMS platforms at the University of Ilorin was very low before the COVID-19 lockdown. Only 6% of respondents were aware of Moodle, 9% of Blackboard and 6% of Canvas. After the lockdown, awareness of mainstream tools such as Zoom, Google Classroom, Google Meet, WhatsApp and YouTube rose sharply, yet 76% of respondents remained unaware of Moodle (Bello, 2022). Alimi (2018) similarly found that most lecturers in Nigerian universities were aware of Google Apps for Education (74.1%) but were generally not competent in using them, and he recommended regular training and retraining.

The second research question sought to determine the extent of utilization of online learning platform among lecturers in Faculty of Education, ESUT. The finding revealed that low extent lecturers in Faculty of Education, ESUT utilize online learning platforms for teaching. The low extent to which lecturers in the Faculty of Education at ESUT utilize online learning platforms reflects a gap between technological availability and actual pedagogical application. While many lecturers are aware of platforms such as Zoom, WhatsApp, and Google Classroom, the use of these tools in actual teaching practices remains minimal. This observation aligns with the findings of Ezeudu and Obi (2022), who observed that while awareness of digital tools may be high among Nigerian educators, consistent and pedagogically sound utilization is often lacking due to limited training, resistance to change, and infrastructural challenges. Oyefara et al. (2021) similarly found that teaching-related ICT facilities were only partly available and rarely functional, with students reporting that 73.8% of lecturers never used teleconferencing. They also concluded that teacher-centred methods remain common in Nigerian universities. Inadequate training, the absence of regular capacity building, poor support infrastructure and unreliable electricity were

among the barriers most often reported. Alimi (2018) likewise found that lecturers were aware of Google Apps for Education but were generally not competent in using them, and that their access was largely limited to their offices. Awareness of a tool therefore does not guarantee that it will be used in teaching. In the ESUT context, the low level of usage may be attributed to the absence of continuous professional development, insufficient digital infrastructure, and perhaps an overreliance on traditional teaching methods.

Furthermore, the underuse of these platforms matters because digital tools are widely regarded as a means of making teaching more learner-centred and collaborative. Oyefara et al. (2021) describe ICT as a tool for making higher education learner-centred and for repositioning the lecturer as a facilitator, yet they found that teacher-centred methods remain common in Nigerian universities. Working within connectivism, Owo and Udoka (2021) likewise argue that technology-enabled networks let learners connect and collaborate beyond the physical classroom. The limited awareness of LMS platforms at ESUT therefore points to a missed opportunity to build student-centred learning environments. This is not only a theoretical concern. Oyefara et al. (2021) found that the availability and use of teaching-related ICT facilities were significantly associated with the quality of lecturers' teaching, with lecturers in universities that had multimedia projectors and tablets more likely to be rated as delivering quality teaching.

Because the Faculty of Education prepares future teachers, limited use of online platforms could perpetuate a cycle of digitally underprepared teachers entering the school system. Lecturers need ICT skills to help learners become proficient in using e-learning platforms (Owo & Udoka, 2021), which makes regular, institution-supported training for faculty a priority.

Conclusion

Based on the findings of this study, it can be concluded that ESUT lecturers show commendable awareness of basic online platforms, but their limited knowledge of advanced educational technologies poses a challenge to comprehensive online pedagogy. Bridging this gap requires targeted professional development, infrastructure investment, and policy support. Also, as revealed by the finding that lecturers in the Faculty of Education at ESUT utilize online learning platforms to a low extent is indicative of a systemic challenge that goes beyond individual reluctance. It reflects broader issues related to capacity building, infrastructure, and pedagogical orientation. As suggests, maximizing the benefits of online platforms in teaching requires deliberate efforts in professional development, policy implementation, and institutional investment.

Recommendations of the Study

Based on the findings and implications, the following recommendations are made:

1. The Faculty of Education should implement continuous professional development programs focusing on digital literacy and pedagogical integration of both common and advanced online learning platforms. These should be practical and context-driven.
2. The university administration should collaborate with ICT providers to improve internet connectivity and access to digital resources, especially in faculty buildings and libraries.
3. Courses should be redesigned to incorporate hybrid learning models, with clear guidelines on the use of online platforms such as Moodle, Google Forms, and YouTube for teaching and assessment purposes.
4. Lecturers should be trained on how to create accessible digital content

for students with disabilities, in compliance with global standards of inclusive education.

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