ACADEMIC STAFF COMPUTER LITERACY NEEDS FOR THE PROMOTION OF E-LEARNING IN TERTIARY INSTITUTIONS IN ENUGU STATE

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ABSTRACT
The study assessed the extent of Academic staff computer literacy needs for the promotion of e-learning in tertiary institutions in Enugu State. One research Questions and one null hypothesis guided the study. The descriptive survey research design was adopted for the study. The population of the study was 3,728 staff comprising 2,921 from the University of Nigeria, Nsukka (UNN) and 807 from Enugu State University of Science and Technology (ESUT). The sample size of the study was 437 (12%) academic staff drawn using the multi-stage sampling procedure. This consisted of 348 from UNN and 89 from ESUT. The instrument for data collection was an adapted questionnaire titled: Computer literacy skills Possessed by Academic Staff for the Promotion of E-learning. The instrument was face validated by five experts, two from the Department of Continuing Education and Development Studies, one from the Department of Science Education (Measurement and Evaluation unit), one from Department of Computer Education and Robotics and one from the Centre for Distance Learning (CDEL), all in University of Nigeria, Nsukka. The reliability coefficient of 0.84 was obtained using the Cronbach alpha estimate. Data were analyzed using mean for the research question, while the t-test statistic was employed to test the null hypothesis at 0.05 level of significance. The findings of the study among others indicated that computer literacy needs of academic staff for the promotion of e-learning in tertiary institutions in Enugu State was at low level. Based on the findings, it was recommended among others, that short refresher workshops should be organized by institutions to strengthen the academic staff's basic computer literacy skills in basic file management and digital organization.

Keywords: Academic staff, computer literacy, computer literacy needs, E-learning

Introduction

Globally today, Computer literacy has become a vital skill for educators as technology elevate e-learning to the forefront of modern education at all levels, including at the tertiary institutions. With e-learning's potential to offer accessible and flexible educational opportunities , ensuring more people can access quality education regardless of location or circumstance; it is being rapidly adopted worldwide (Ricart, 2024). Also, in Nigeria, the educational system at the tertiary levels is gradually aligning with the global educational change, characterized by transition from traditional system to e-learning. The transition to e-learning offers immense potential to expanding educational opportunities in tertiary institutions in Nigeria due to the significant challenges faced by traditional educational system. The challenges include poor access stemming from limited infrastructure, low carrying capacity, lack of flexibility to accommodate the working population, inability to continue education during disruptions (conflict, disasters, pandemics such as the COVID-19) among others (Edeh et al., 2025). The limitations often result in unequal educational opportunities and hinder the development of a skilled workforce. Hence, the need for e-learning which leverages the use of digital technologies to bridge these access barriers and facilitate flexible teaching and learning.

E-learning, according to Adeoye et al. (2020), involves an electronic system of learning that provides convenience and flexibility to both academic staff and students, linked with internet-based learning in an interactive platform. Therefore, Edeh et al. (2025) pointed out that this type of learning does not necessarily need the traditional classroom but access to computers and internet are very crucial for one to take advantage of teaching and learning. In support of this opinion, Kumar et al. (2018) defined e-learning as the utilization of computer networks, mainly via the internet, to provide access to information and teaching to individuals. Furthermore, Bubou and Job (2021) corroborate this and defined e-learning as the utilization of digital technologies such as the computers, the web, internet, social media, mobile phones, tablets and digital video disc (DVD), compact discs, to support teaching and learning whether within and outside of the traditional classroom setting, encompassing both asynchronous and synchronous. These definitions highlight the strong presence of digital technologies in e-learning, with the computer at the forefront. Hence, proving that it's essential for both teachers and learners to possess the knowledge and ability to utilize various kinds of digital technologies especially the computer system, to support learning both in the classroom, and at a distance. Therefore, in this study, e-learning is seen as the utilization of digital technologies such as the computer and its internet-based platforms to facilitate teaching and learning in synchronous or asynchronous environments.

E-learning, according to Carter (2024), personalizes education with adaptive technologies and leverages the internet's vast resources to improve learning outcomes. They reduce costs associated with traditional education, making it more affordable and accessible. E-learning enables professionals in upskilling for career and personal development, as well as promoting lifelong learning. Hence, e-learning plays a dual role, and can serve as a substitute for and a supplement to traditional education. This flexibility is relevant to achieving the objectives of distance education, including e-learning as it's component, such to democratize education, enhance workforce skills, internationalize curricular and facilitate expert remote instruction (Federal Government of Nigeria, 2013). However, in order to achieve these objectives in tertiary institutions, academic staff must be proficient in computer literacy skills.

Computer is an electronic device with the capability to accept, transfer, store and process data to produce results following a given instruction. Computers were first introduced into education initially as simple tools for administrative tasks and basic computer literacy programmes. Over time, Carter (2024), recounts that as technology advanced and with the introduction of educational software in 1980s and 1990s offering more engaging and interactive learning experiences, the role of computers in education expanded dramatically. This laid the foundation for e-learning revolution. On the other hand, UNESCO (2005) has defined literacy as the capacity to identify, understand, interpret, create, communicate, and compute using written and printed materials across a variety of contexts. This contemporary view positions literacy as a continuous learning process, that equips individuals to achieve their goals, enhance their knowledge and skills, and actively participate in their communities and society at large. It recognizes literacy as more than just reading and writing in a specific language; it is a fluid and adaptive set of practices that demands constant development. Literacy in the digital era has evolved beyond the traditional perspective, where it was once simply understood as an individual's ability to read and write in daily life (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2013a) and Ng et al., 2021). With the rise of digital technologies, literacy now encompasses the ability to comprehend and utilize digital

technologies, such as computers, as a means of engaging in social and educational activities. Computer could solve variety of problems easily, accurately and speedily. Therefore, the understanding and definition of computer literacy vary based on individuals' personal and professional use and specific needs, making it applicable to people from all walks of life. According to Kozina et al. (2012), computer literacy denotes the capacity to obtain and employ a fundamental comprehension of contemporary computer hardware systems and software applications to a challenge within a specific work or personal environment. Furthermore, Enemuo and Okigbo (2021) defined computer literacy skill as one's knowledge and competence in handling computer systems, encompassing the ability to recognize computer software and hardware, and being skillful at using software within computer systems. That is to say that computer literacy involves an Individual being able to identify and manipulate both hardware and software of the computer system efficiently without assistance.

Also, computer literacy denotes the capability to utilize computers at proficiency level for the purposes of communicating, collaborating and creating in a digitally literate society (Alavi, Borzabadi & Dashtestani, 2016). In a world where information is very crucial, computer literacy helps in the production and transmission of information as well as its communication without geographical barriers. Furthermore, Devian (2016) noted that computer literacy covers various elements, such as awareness of technology, technical terminology, computer components, data and programme concepts, methods of computation, file and document handling, image manipulation, multimedia usage, resource assessment, and communication with others. Computer literacy involves being aware of how the computer operate and work, meaning that it entails familiarity with the activities of the computer software, hardware and internet. Therefore, contextually, computer literacy is viewed as the knowledge and skills in using computers, both hardware and software, competently for teaching and learning in an e-learning environment.

Some goals that have been established and whose attainment might result in computer literacy according to Akinnubi et al. (2012) are familiarity with the historical background of computers; familiarity with the parts of computers and how they work; familiarity with the use of computers; awareness of computer-related concerns like privacy and artificial intelligence; proficiency with utilizing a computer to develop and carry out basic activities. In continuation, others include the ability to create flowcharts, the understanding that computers are useful tools, and the ability to maintain hardware and software. The achievement of these goals will result in the gaining of computer literacy skills.

There are various skills that are embedded in computer literacy as identified by different authors. For instance, Nwachukwu and Asom (2015) and Fati and Adetimirin (2017) highlighted that basic computer literacy skills encompassed the capability to turning a monitor, printer, and a computer on or off, utilizing Macintosh operating system, use disk operating system (DOS) commands and using Windows operating system. Additionally, the skills involve launching a software programme, managing folders or directories on hard drives, minimizing windows, sets up a new personal computer, opening and closing files, using the mouse, managing various windows, copying files, transitioning between keyboard and mouse input, among others. However, Ivanov and Vaino (2018) noted that the performance of basic tasks with a computer does not indicate computer literacy, but attaining the level of proficiency in those specific tasks. Thus, Rozi (2018) divided computer literacy skills into three levels namely, basic, intermediate and proficiency level. Basic computer literacy is the root of all the skills and involves simple

skills employed daily such as turning on and off the computer, saving files, printing documents. On the intermediate level, the abilities people rarely employ when using their computers are covered by intermediate computer literacy and they include the use of peripheral devices, such as digital cameras, projectors and scanners among others, to recognize and save files in multiple formats (Rozi, 2018). The proficiency level includes computer skills needed for use in educational, such as in e-learning or professional settings such as organizing email inboxes, making and editing movies and animations, inserting a specific graphic, and use of electronic blackboards among others.

For the promotion of e-learning, it is believed that academic staff that are computer literate are able to not only master the skills to use computer hardware but are also able to use application software such as Microsoft word, excel, power point, email management, internet navigation among others. Hence, Enakrire (2024) noted that computer skills have enabled academic staff in the open distance e-learning environment to accomplish their work where they develop modules/course materials for the classes taught, harvest online educational resources to write research papers, among other things such as save and manage information and data in Word processing, file management, presentation graphics, spreadsheet, and browsing the internet. More specifically, Fort (2017) listed some computer literacy skills for academic staff or teachers such as word processing skills, spreadsheet skills, electronic presentation otherwise known as power point, internet navigation skills, email management among others. The activities could enhance learning for students and teaching for academic staff, particularly in e-learning context.

In this study, academic staff includes lecturers, faculty members, and other teaching professionals employed within the tertiary institutions. Studies by Ogunode et al. (2020) and the University of Manitoba (2022) indicate that the primary responsibilities of academic staff globally, including Nigeria, rest within three main domains: teaching, research, and community service. However, Basilotta-Gómez-Pablos et al. (2022) and Enakrire et al. (2025) averred that rapid technological advancement has made it mandatory for academic staff to also possess high level of digital literacy. This enables them with creativity and flexibility to adopt digital technological innovations that promote teaching and learning just like the use of computers for e-learning activities. Computer literacy is an essential skill for academic staff to function seamlessly in an e-learning environment. This assertion is supported by Enakrire (2024) who explained that the structure of the e-learning curriculum is developed in such a manner that without computing skills, it becomes difficult for any lecturer to navigate in that space. Computer literacy skills enhance the knowledge to effortlessly and smartly connect to the internet. This include learning applications and software such as learning management system (e.g. blackboard, Moodle, Google classroom etc.), video conferencing tool (zoom, Microsoft meet etc.) digital content creation tools (canvas), e-book and digital library among others. The importance of computer literacy skills to e-learning emphasizes the demands placed on academic staff to possess the skill in order to drive e-learning's implementation. Therefore, the knowledge of staff computer literacy needs maybe crucial to adoption of teaching and learning innovations such as e-learning in tertiary institutions.

Tertiary institutions refer to institutions providing higher education, which according to Eze et al. (2018), includes Universities, Polytechnics, Colleges of Education, and other institutions offering correspondence courses. However, in this study, tertiary institutions refer specifically to public universities or universities owned by federal and state government. Public Universities are Universities owned by Federal and State Government. This form of tertiary institution has possibility to serve and impart

knowledge to individuals of varying socio-economic backgrounds as they are moderately affordable and sponsored by the government. National University Commission [NUC], (2023) showed that about 20 distance learning accredited Federal Universities and some other State-owned Universities have embraced e-learning or online learning mode and more are still on the way.

In Enugu State, apart from University of Nigeria, Nsukka and Enugu State University of Science and Technology, which are NUC accredited institutions running e-learning programme in Nigeria, some other tertiary institutions also run e-learning programme in their various institutions. However, Okafor (2022) observed that the e-learning adopted in Nigeria, and in Enugu State is usually in form of lecture note on CD-ROM which can be played at learners' convenience. However, contemporary studies have shown that e-learning is more than lecture note on CD-ROM. It must be complemented with the use of computer and its other related software, connected to the internet so as to provide access to quality education in all tertiary institutions (Eze et al., 2018; Jain et al., 2024). Hence, this connectivity to internet would also ensure the continuity of a synchronous learning even when there is a disruption, as was evident during COVID-19.

Unfortunately, during COVID, there was a declaration by Federal Ministry of Education in Nigeria for closure of schools in order to contain the spread of the virus. The closure disrupted traditional classroom teaching and learning in Nigeria, including in Enugu State, as most educational activities were halted without any alternative means of teaching and learning (Ukwueze, & Adama, 2021; Okagbue et al., 2023). Hence, Sambo et al. (2021) noted that the outbreak of COVID 19 exposed the deficiencies in the Nigeria's (Enugu State inclusive) educational system, as students in public institutions helplessly wasted at home for 10 months without academic engagement. This disruption of academic activities in certain universities has been linked to the inability to adopt online distance education by certain universities and academic staff during the pandemic (Marinoni et al., 2020 ; Nwachukwu et al., 2021). The inability to adopt online distance education was mostly due to the absence of suitable digital infrastructure, limited digital learning preparedness and expertise such as the use of the computer to connect to internet and its related software to support educational activities resulting in the complete suspension of teaching. This position is supported by Enakrire (2024) who explained that limited knowledge and skills in computer systems would not allow lecturers to set the computer up, connect to the internet, and use it to process other work activities that surround teaching and learning and research in open distance e-learning environment. Therefore, the pandemic underscored the benefits of e-learning during crisis when face-to-face classroom teaching and learning is impossible. As well as the need for adequate academic staff digital literacy preparedness, particularly in the area of computer literacy, which is essential to drive e-learning?

Computer literacy equips academic staff with the skills to use computer and its related technologies for various academic tasks, particularly in e-learning environment. It facilitates the effective access to the internet and the navigation of online resources for research and learning, as well as the creation of digital content, management of online courses via Learning Management System, and digital communication, ultimately enhancing their teaching and administrative efficiency. In Enugu State, although many academic staff in tertiary institutions owned laptop, it still appears that they lack sufficient computer literacy skills to utilize both the technological devices and services needed for e-learning. The apparent inadequate computer literacy skills among academic staff significantly hampered the seamless transition to online learning when tertiary institutions

were forced to close during the COVID-19 lockdown. This deficiency in utilizing essential technological devices, such as computers for learning purposes, and crucial online services like Learning Management Systems (LMS) for content delivery and assessment, video conferencing platforms for virtual lectures, and digital content creation tools for developing engaging materials meant that lecturers were largely unprepared to deliver instruction remotely. Consequently, the disruption caused a substantial setback in the academic progress of students, resulting in the unfortunate loss of an entire academic session. This experience underscores the critical need to assess the computer literacy needs of academic staff to ensure the continuity of the education system in the face of future disruptions and to fully embrace the opportunities offered by e-learning. Hence, it is against this background that the study intends to assess the extent of Academic staff computer literacy needs for the promotion of e-learning in tertiary institutions in Enugu State.

Purpose of the Study

The general purpose of the study was to assess the extent of academic staff computer literacy needs for the promotion of e-learning in tertiary institutions in Enugu State. Specifically, the objective of the study was to:

1. determine the extent of academic staff computer literacy skill needs for the promotion of E-learning in Tertiary institutions in Enugu State.

Research Question

1. What is the extent of academic staff computer literacy skill needs for the promotion of e-learning in tertiary institutions in Enugu State?

Hypothesis

The hypothesis that is provided for guidance and subsequently tested at a significance level of 0.05 is:

$H0_1$: There is no significant difference between the mean ratings of State-owned and Federal Universities on the extent of academic staff computer literacy skill needs for the promotion of E-learning in tertiary institutions in Enugu State

Methods

A descriptive survey research design was adopted for the study and a need-gap analysis was integrated. The population comprised 3,728 academic staff, including 2,921 from the University of Nigeria, Nsukka (UNN) and 807 from Enugu State University of Science and Technology (ESUT). A sample size of 437 (12% of the population) was selected in line with the recommendation of Nwana (1981), as cited in Edeh et al. (2020), which suggests that for populations in the thousands, a sample size of 10% or more is adequate. A multi-stage sampling procedure was employed to select the sample size. In the first stage, academic staff was stratified based on faculties in both universities (18 and 12 faculties in UNN and ESUT respectively). In the second stage, 30% of faculties were purposively selected based on staff strength and proximity, resulting in five (5) faculties (Arts, Education, Physical Sciences, Social Sciences and Engineering) from UNN and four (4) faculties (Applied Natural Sciences, Education, Engineering and Social Sciences) from ESUT. In the third stage, 50% of academic staff were drawn from the selected faculties. This resulted in a total of 701 and 185 Academic staff from UNN and ESUT respectively. At this stage, convenience sampling technique was used to select two departments each from the selected faculties in both Universities, resulting in 348 staff and 89 from ESUT. From UNN, the selected departments were Mass Communication and English (Faculty of

Arts), Adult Education and Arts Education (Faculty of Education), Computer Science and Statistics (Faculty of Physical Sciences), Philosophy and Psychology (Faculty of Social Sciences) and Agricultural Engineering and Civil Engineering (Faculty of Engineering). From ESUT, Applied Biology and Computer Science (Faculty of Applied Natural Sciences), Educational Management and Adult Education (Faculty of Education), Mechanical Engineering and Computer Engineering (Faculty of Engineering) and English and Sociology (Faculty of Social Sciences) were the selected departments. Simple random sampling technique was used to select the required number from each Department. Data were collected using an adapted questionnaire titled Computer Literacy Skills Possessed by Academic Staff for the Promotion of E-learning (CLSPASPE). The instrument was developed by adapting and modifying relevant items from existing studies, specifically Nwachukwu and Asom (2015), Fati and Adetimirin (2017), and Fort (2017) to suit the present study. The instrument consisted of two sections: Section A captured demographic information, while Section B contained 11 items measuring the extent of computer literacy skills possessed by Academic Staff for the promotion of e-learning in tertiary institutions using a 4-point rating scale. The instrument was face validated by five experts, two from the Department of Continuing Education and Development Studies, one from the Department of Science Education (Measurement and Evaluation unit), one from the Department of Computer Education and Robotics and one from the Centre for Distance Learning (CDEL), all in University of Nigeria, Nsukka. Reliability was established through a pilot test involving 20 academic staff from Nnamdi Azikiwe University, Awka, who shared similar characteristics with the study population. A Cronbach alpha coefficient of 0.84 was obtained. A total of 437 copies of the questionnaire were administered with the assistance of three research assistants, out of which 359 were properly completed and returned, representing an 82% response rate. Data were analyzed using mean scores, while the t-test statistic was used to test the null hypothesis at a 0.05 level of significance.

RESULTS

Research Question: What is the extent of academic staff computer literacy skill needs for the promotion of e-learning in tertiary institutions in Enugu State?

Table 1: Mean showing the Need- Gap of Respondents on the extent of academic staff Computer Literacy Skill Needs for the Promotion of E-Learning in Tertiary Institutions in Enugu State(n=359)

S/N	Item Statement	Possessed		Needed	
		$\bar{X}_{CSP}$	Remarks	X_{SS}-$\bar{X}_{CSP}$	Remarks
	Basic skills- Ability to:				
1.	correctly boot/switch off the computer	2.90	HP	1.10	VLN
2.	open, save and close documents in Microsoft word	2.84	HP	1.16	VLN
3.	Create folders for organizing online course materials	2.56	HP	1.44	VLN
	Intermediate skills				
4.	Manipulate peripheral devices such as keyboard, mouse, printer etc.	1.94	LP	2.06	LN
5.	copy and paste files into	2.59	HP	1.41	VLN

	secondary devices such as USB flash, DVDs etc.				
6.	Install educational software	2.19	LP	1.81	LN
7.	create word document such as lesson notes using Microsoft word	2.67	HP	1.33	VLN
8.	create electronic presentations using software such as Microsoft PowerPoint, Google slides etc.	1.48	NP	2.52	HN
9.	Display and navigate slides during a live presentation	1.39	NP	2.61	HN
10.	create spread sheets using Microsoft excel or Google sheets	1.48	NP	2.52	HN
	Proficiency skills				
11.	apply animations to texts, images in electronic presentation	1.40	NP	2.60	HN
12.	utilize graphic tools such as Canvas, Corel draw etc.	1.41	NP	2.59	HN
13.	Use track changing feature to review students' work or assignment in Microsoft word	1.92	LP	2.08	LN
14.	Troubleshoot to solve hardware and software problems	2.34	LP	1.66	LN
15.	Insert and edit multimedia elements such as images to support electronic presentation of contents	1.30	NP	2.70	HN
16.	Ability to secure files and folders using passwords	2.55	HP	1.45	VLN
17.	Use interactive electronic boards for teaching	1.30	LP	2.70	HN
	Grand Mean	**2.01**	**LP**	**1.99**	**LN**

NB: NP- Not Possessed; LP –Lowly possessed; HP –Highly Possessed; XCSP - Mean for current skill possessed; XSS - Mean of Standard Skill = 4 points; HN - Highly Needed; LN - Lowly Needed; VLN – Very lowly Needed

Table 1 showed that items 1, 2, 3, 5, 7 and 16 have mean scores of 1.10, 1.16, 1.44, 1.41, 1.33 and 1.45 rated as rarely needed as they are highly possessed, while items 4, 6, 13 and 14 are 2.06, 1.81, 2.08 and 1.66 classified as lowly needed as they are lowly possessed. On the other hand, items 8, 9, 10, 11, 12, 15 and 17 with mean scores of 2.52, 2.61, 2.52, 2.59, 1.40, 2.70 and 2.70 are regarded as highly needed. The grand mean score of 1.99 indicated that computer literacy skill needs of staff for the promotion of e-learning in tertiary institutions in Enugu State is low.

Hypothesis One: There is no significant difference between the mean ratings of State-owned and Federal Universities on the extent of academic staff computer literacy skill needs for the promotion of E-learning in tertiary institutions in Enugu State

Table 2: t-test analysis of the difference between the mean ratings of respondents on the extent of academic staff computer literacy skill needs for the promotion of E-learning in tertiary institutions in Enugu State

Group	N	$\bar{X}$	SD	Df	t_{cal}	P_{value}	Decision
State-owned University (ESUT)	70	2.05	.25				
				357	1.32	.19	Accepted
Federal University (UNN)	289	2.01	.24				

Data on Table 2 showed that the mean score of State-owned University (ESUT) is 2.05, while Federal University (UNN) is 2.01. The Table further showed that at t_{cal} = 1.32, the probability value is .19 at 0.05 level of significance, hence, the acceptance of the null hypothesis. This implies that there is no significant difference between the mean ratings of State University (ESUT) and Federal University (UNN) on the extent of academic staff computer literacy skill needs for the promotion of E-learning in tertiary institutions in Enugu State.

Discussion

The findings of the study in research question indicated that to a low extent, academic staff computer literacy skills are needed for the promotion of e-learning in tertiary institutions in Enugu State. This low level reflects the inadequate possession of computer literacy skills among academic staff, indicating a significant gap between existing skills and those required for effective e-learning. The findings of this study is supported by the findings of Ezenwafor (2011), who reported that 75% of the academic staff in tertiary institutions perform low in computer literacy skills for teaching and learning and hence, they highly need the skills. The percentage calls for the search for the computer literacy skill needs of academic staff for the promotion of e-learning in tertiary institutions. For instance, some of these skills the study reviewed were found to be lowly possessed at intermediate and proficiency level, hence, lowly needed. Also, the findings of the study are in tandem with the findings of Asom and Nwachukwu (2015) that discovered average level of computer literacy skills among academic staff. However, the findings of this present study are contrary to the findings of Oriji and Nnadieze (2023), who show that majority of his respondents, were computer literate. The existence of discrepancies among these three studies, this present study, Asom and Nwachukwu (2015); and Oriji and Nnadieze (2023), could likely be as a result of the level of exposure in the use of computer for teaching and learning or other parameters not disclosed

The hypothesis indicated that there is no significant difference between the mean ratings of academic staff in State University (ESUT) and Federal University (UNN) on the extent of academic staff computer literacy skill needs for the promotion of E-learning in tertiary institutions in Enugu State. The existence of no significant difference between academic staff in both Universities is an indication that they possess similar levels of computer literacy skills. Also, this suggests that the pattern of skill possession is consistent across both institutions. This similarity may be attributed to comparable institutional

environments, access to digital facilities, and exposure to e-learning practices in both institutions. The finding of no significant difference in the present study aligns with Enemuo and Okigbo (2021), who reported no significant difference between federal and state colleges of Education lecturers in the utilization of basic computer literacy skills such as Microsoft Word and internet operations. However, they found significant differences in the utilization of more advanced skills such as PowerPoint and Excel. This suggests that while basic computer literacy skills may be uniformly possessed across institutions, variations may exist in higher-level competencies. This implies that the need for improvement in computer literacy skills is common to academic staff in both universities in order to perform their daily academic activities in e-learning.

Conclusion

The study concludes that the extent of Academic staff computer literacy needs for the promotion of e-learning in tertiary institutions in Enugu State is low. This deficiency is particularly evident at the intermediate and proficiency level, where academic staff demonstrated limited competence in multimedia integration, presentation tools, and instructional software utilization. The implication of these deficiencies is that academic staff may be unable to effectively design, deliver, and manage digital instructional content, thereby limiting the successful integration of e-learning in tertiary institutions. Therefore, addressing these skill gaps is essential for improving digital teaching effectiveness and advancing e-learning practices.

Recommendations

Based on the findings, the study recommended the following:

1. Short refresher workshops should be organized by institutions to strengthen the academic staff's basic computer literacy skills in basic file management and digital organization.
2. Intensive training programme should be organized to enhance academic staff's ability to effectively use digital presentation tools for live instructional delivery, particularly in PowerPoint, Google Slides, and slide navigation.
3. Training of academic staff in the use of advanced computer literacy skills for e-learning instructions should be intensified. particularly in multimedia integration, interactive electronic board usage, graphic design tools, and troubleshooting.

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