AJEMATES
African Journal of Educational Management, Teaching and Entrepreneurship Studies
VOL.10 (1), October-December, 2023 https://ajemates.org

CHALLENGES TO LECTURERS UTILIZATION OF INFORMATION COMMUNICATION TECHNOLOGY IN TEACHING AND IMPEDIMENTS TO QUALITY E-LEARNING UPTAKE AMONG STUDENTS OF NNAMDI AZIKIWE UNIVERSITY, AWKA, ANAMBRA STATE

Akudo, Florence U. (Ph.D.)
Mobile Phone N0: 08036661864; Email: makudos@yahoo.com
&
Prof. Obi, Emenike F.
Mobile Phone N0: 08033371735; Email: profemeobi@yahoo.com
Department of Educational Management and Policy
Faculty of Education
Nnamdi Azikiwe University, Awka, Anambra State

ABSTRACT

This study investigated the Challenges to Lecturers Utilization of Information Communication Technology in Teaching and Impediments to Quality E-Learning Uptake among Students of Nnamdi Azikiwe University, Awka, Anambra State. Four research questions guided the study, including four null hypotheses formulated and tested as well. The descriptive survey research design was employed in order to conduct the study. Population for the study consisted of all the 1,964 Heads of Departments (HODs) together with lecturers within 91 Departments from 14 Faculties in Nnamdi Azikiwe University (NAU), Awka, Anambra State. The sample size for the study comprised a total of 1,440 participants, incorporating 65 HODs and 1,375 lecturers selected from 14 Faculties in the university (NAU) using a stratified random sampling technique. A researchers' self-developed questionnaire titled: Challenges to Lecturers Utilization of ICT in Teaching and Impediments to Quality E-Learning Uptake Questionnaire (CLUICTTIQELUQ) which was constructed for HODs and lecturers, containing 42 items and designed on a 4-point scale, was used for data collection. The research instrument was validated by two experts from Educational Management and Policy Department and one expert from Measurement and Evaluation Unit, Faculty of Education, Nnamdi Azikiwe University, Awka, Anambra State. Reliability of the questionnaire was established through a pilot-test sampling 5 HODs and 25 lecturers from one federal university in Enugu State, which was not part of the study. The result obtained from the data collected were computed and the coefficient value were measured using the Cronbach Alpha method to give coefficient reliability of 0.85, 0.83, 0.76 and 0.87 for the four clusters respectively; and were added up and divided to give an overall internal consistency reliability (r) - value of 0.82, showcasing that the questionnaire was reliable. Data collated for the study were analyzed using mean scores and standard deviation in order to answer all the research questions. The hypotheses were tested at an alpha level of 0.05 significance using the t-test statistics. Findings of this study revealed among others that, all the factors investigated as regards to the institutional internal-based factors, institutional external-based factors and lecturers personal-related factors were challenging to lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State. The differences in the mean rating of HODs and lecturers on all these factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State was not significant. The study recommended among others that; the institutional head, that is, the Vice-Chancellor working together with other university officials and backing from the National Universities' Commission (NUC) should employ workable/strategic plans through adequate mobilization of the ICTs and installation of Local Area Network (LAN),

deployment of efficient maintenance culture for the ICT infrastructure, promotion of ICT-based instructions, among others, in order to curb the institutional internal-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University (NAU), Awka, Anambra State.

Keywords: *Challenges, Lecturers, Utilization, ICT, Teaching, Impediments, Quality, E-learning uptake.*

Introduction

The Nigerian Universities whether private or public, which includes Nnamdi Azikiwe University (NAU), Awka, Anambra State, are all important citadel of higher education learning known for manpower training and development. The university occupies the highest cadre in the level of higher education system. However, the Nigerian universities have very important role to play in sustainable development in all aspects of socio-economic, cultural, political, religious and environmental development of the nation. To produce the necessary professionals and manpower for the country, the university offers different programmes and courses in various fields of studies and endeavours through quality teaching and learning, research and effective community or public service delivery. The university however, have been established with several goals and objectives as indicated by the Federal Republic of Nigeria (FRN, 2014: 39) in the National Policy on Education (NPE). Attainment of all the goals and objectives of the universities lies mostly in the hands of the academic staff, that is, lecturers. Lecturers in the universities are important human resources and machineries responsible for effective implementation of the education policy for achievement of both educational goals and the national objectives. Based on this facts, the lecturers are expected to remain consistently and constantly very proficient, active, effective and efficient while teaching in the classroom and delivering instructions. They should possess specific skills, quality and abilities to utilize sufficiently various educational resources like the Information and Communication Technologies (ICTs) that will make them efficient in teaching in the lecture halls and rooms. As such, lecturers should make effective use of the ICT to achieve their instructional goals and objectives.

The Information and Communication Technology (ICT) has been widely recognized to be very effective in assisting educators and teachers to provide quality teaching and learning in the classroom when adequately utilized and explored. Olosunde and Akinpelu (2010) observed that ICT are enabling technologies (both hard wares and soft wares) necessary for the delivery of voice/audio data/high-speed and low-speed, video, fax and internet services, using wired and wireless resources/media and associated equipment that are connected via Internet-Protocol (IP). It covers internet services\provision, telecommunications equipment and services, information technology equipment and services means and broadcasting, commercial information and communication activities, international network, among others (Chukwuma & Aniekwe, 2011). The information and communication technology (ICT) has remarkably influenced all fields of the world today. As a versatile instrument, ICT has the capability not only to engage students in instructional activities but also to increase their learning, but helping them to solve complex problems to enhance their cognitive skills (Habibu, Al-Mamun & Clement, 2012). It is a fact that lecturers in the universities are at the center of curriculum change and they control the teaching and learning processes. Therefore, they must be able to prepare undergraduate and postgraduate students for the knowledge society in which the competency of using ICT to acquire and process information is very important. ICT plays various roles in both the teaching and learning processes. The fact remains that the use of various

ICT tools and gadgets have led to the introduction of e-learning. As regards, e-learning can be viewed as a component of the ICT.

E-learning can be defined as all forms of electronically supported learning and teaching which are procedural in character and aim to effect the construction of knowledge with reference to individual experience, practice and knowledge of the learner (Otuka 2010). Due to the relevance of ICT in the education system including the universities, it has become very vital that its different resources including e-learning be widely adopted for teaching and learning in the field. Eze, Chinedu-Eze and Bello (2018) opined that e-learning education is concerned with the all-inclusive integration of modern telecommunication equipment and ICT resources into the education system for quality teaching, learning and research. Thus, e-teaching and learning which occurs on any digital platforms is aimed at establishing a framework in which lecturers and students interact and communicate effectively for continuous learning and research aimed at realizing quality human capacity development and educational objectives. Quality e-learning activities in the university can take the form of off-line/ordinary computers, telephone/wireless applications, on-line/internet computers, use of scanners, printers and emails, multimedia television, multimedia projectors, digital library, ready-made courseware: CD-ROM, etc (Nwana, 2012). The benefits of quality e-learning just like the ICT are enormous. E-learning is however, generally found to have numerous benefits in higher education in Nigeria as observed by most scholars and writers. Adeoye, Adanikin and Adanikin (2020) posited that notable applications and benefits of e-learning in the university education system include, interactivity, quality content delivery and boosting of learners and lecturers' confidence in the educational sector, students' engagement in active learning, among others. Some of the benefits of e-learning in higher education from several scholars have further been disclosed.

Obidile and Onyeagba (2019) opined that through e-learning in education, distance learning is made possible and this helps to enhance the accessibility of educational programmes to individuals who are constrained from attending traditional universities. E-learning brings to bear the Internet, the Web, and computer-assisted learning to the teaching and learning of courses in different fields of endeavour which could make the courses easier, interesting, accommodating and participatory. E-learning could improve the teaching and learning standard by encouraging learning through ongoing discussion, directed instruction, self-learning, critical thinking, data seeking and analysis (Yuen, Law & Wong, 2003). According to Habibu, Al-Mamun and Clement, (2012), technology integration is meant and should be utilized as a tool to support educational objectives such as skills for searching and assessing information, cooperation, communication and problem-solving which are important for the preparation of students for the knowledge society. In fact, innovative use of ICT can facilitate student-centered learning and promote quality up-take of e-learning among students especially in the university (Habibu, Al-Mamun & Clement, 2012). Hence, every lecturer in the university should use learning technologies to enhance quality e-learning uptake among students in every course of study because it can engage the thinking, decision making, problem solving and reasoning behaviours of students. These are cognitive behaviours that students need to learn in an information age. Although ICT may facilitate independent self-paced learning, the potential of ICT may not be optimized if there is no shift in the learning and teaching paradigm. In fact, lecturers play significant role in the teaching-learning paradigm shift. They must understand the potential role of ICT in education, especially in e-learning uptake. Also, they should become effective agents to be able to

make use of technology in the lecture rooms and halls. Notwithstanding, the benefits and advantages of utilizing various ICT tools and resources in education, yet many universities and Nnamdi Azikiwe University (NAU) inclusive, are found not having sufficient ICT facilities that will enhance quality teaching and learning, couple with e-learning uptake among students. The poor accessibility, mobilization and utilization of ICTs in the universities have been found by most scholars, writers and researchers to be caused/responsible by some challenges.

Challenges hence as referred in this present study are obstacles, negative factors, hindrances and barriers with negative consequences which can prevent something or someone to achieve certain goals and objectives. In essences, the challenges to lecturers' utilization of ICT are such barriers and negative factors that prevent lecturers in the university from utilizing ICT in teaching which equally course impediments on quality e-learning uptake of students. Utilization on the other hand can be termed as lecturers' easy access to effective use of ICT resources or tools in the university. It can be seen as the magnitude at with various ICTs are been deployed to support teaching and learning in the university. The challenges to lecturers' utilization of ICT as indicated by the studies of Habibu, Al-Mamun and Clement (2012), Ilaonisi and Osuagwu (2010), Nwana (2012), Ogbomo (2011), Ogueche and Nri (2021), and Suberu (2013), among others, is associated to their high cost, poor education funding, lecturers' incompetency and lack of skills in utilizing the ICT, poor electricity supply, shortage of resources and facilities in educational institutions, lack upgrade, maintenance and replacement of ICT tools, among many others. These problems can be identified based on such factors as external factors, institutional related factors, leadership factors, teacher-related factors, technological factors, among others. The Ogueche and Nri (2021) asserted that the government failure to effectively implement the ICT policy in Nigerian educational institutions is a very big challenge to utilization of the resources in schools.

From all the foregoing, the present study sought to investigate and find out those institutional internal-based factors, institutional external-based factors and lecturers personal-factors challenging lecturers' utilization of ICT in teaching in NAU, Awka, Anambra State. The institutional internal-based factors as indicated in the studies of Edumark (2014), Garba and Onyebuchi (2015), Emengini, Igwe, Anyanwu, Okeke-James and Iwundu (2021), are those challenges found within the institutions caused by the institution's leadership and management, among others; while the institutional external-based factors as observed in the studies of Faben and Nwaokwa (2016), and Obidile and Onyeagba (2019), are those challenges associated with the government and other private institutions lack of support and encouragements through adequate funding and policy implementation for lecturers' utilization of ICT in the university. Lecturers personal-factors are those challenges related to the lecturers themselves in the form of their lack of proficiency, negative attitude and poor competency in use of ICT, among others. All these challenges to lecturers' utilization of ICT is equally responsible for the impediments of quality e-learning uptake among students of the university in the country (Adeoye et al (2020); Ja'ashan (2020); Mutisya & Makokha (2016); Tugwell & Maduabuchukwu, 2020), without NAU as an exception. When the various ICTs are not sufficiently and efficiently utilized in the universities, this results into an impediment towards quality e-learning uptake in the institution. This is so because the provision of ICT resources in the universities, breeds and encourages e-learning where students' assessments, projects, researches, teaching and learning can be improved through quality e-learning ushered by the utilization of ICT. Due to ICT's importance in society and possibly for the future of university education,

identifying the challenges to lecturers' utilization of ICT in teaching and its impediments to quality e-learning uptake among students in higher educational institutions like the Nnamdi Azikiwe University (NAU), Awka, Anambra State, becomes a crucial step in improving the quality of teaching and learning delivery. Balanskat, Blamire, and Kefala cited in Habibu, Al-Mamun and Clement (2012) argued that although the university lecturers likewise other educators appear to acknowledge the value of ICT in their institutions, difficulties continue to exist during the processes of utilization of these technologies. This present study therefore, sought to bring together the findings and the key points from a review of a significant part of the available literature associated with difficulties and challenges that lecturers are facing in utilizing the ICT in teaching-learning process. Identifying these fundamental challenges will assist lecturers and educators including the university's management and leadership to overcome these problems and become successful technology adopters. Moreover, this study investigated the challenges to lecturers' utilization of information communication technology in teaching and impediments to quality e-learning uptake among students, focusing on Nnamdi Azikiwe University, Awka, Anambra State. The study also investigated the impediments of the challenges of lecturers' utilization of the information and communication technology in teaching to quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State. In fact, understanding the institutional internal-based factors, institutional external-based factors, and lecturers personal-factors challenging lecturers' successful utilization of ICT and their connection with the impediments to quality e-learning uptake among students of Nnamdi Azikiwe University (NAU), Awka, Anambra State is a vital precondition for improving the utilization of ICT in teaching and promotion of e-learning in the higher educational institutions for the enhancement of quality e-learning uptake in the classrooms.

Statement of the Problem

The rapid growth and wide application of ICTs in teaching and learning in several universities, especially in Nnamdi Azikiwe University (NAU), Awka, Anambra State has tremendously brought in transformation and development within the environment. Utilization of ICT in teaching sought to bring about quality e-learning uptake among undergraduate and postgraduate students which has remarkable impacts in promoting high academic excellence and achievements. The benefits of lecturers' utilization of ICT in teaching in the university education system are enormous and therefore, should not be neglected or overlooked. Consequently, different ICT resources such as e-learning are being utilized in education to adequately equip the graduates for productive living in the information age. Undoubtedly, the utilization of ICT which paves way for quality e-learning uptake in higher education like the university will enhance teaching and learning effectiveness in different fields and course of study. The problem of this study is that the pace of e-learning uptake by students in NAU, Awka seems very slow. This is confirmed by personal observation of the researchers and interactions with lecturers in NAU, Awka. This backward trend owing to some challenges obviously will have negative impacts and consequences on quality of the products (that is, students) of the programme. Hence, this study was deemed imperative as it was to guide relevant stakeholders in taking objective steps towards addressing the problem.

Objectives of the Study

This study focused on examining the Challenges to Lecturers Utilization of Information Communication Technology in Teaching and Impediments to Quality E-Learning Uptake among Students of Nnamdi Azikiwe University, Awka, Anambra State. Specifically, the study sought to:

1. Find out institutional internal-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State.
2. Determine the institutional external-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State.
3. Examine lecturers' personal-related factors challenging their utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State.
4. Find out the impediments of the challenges of lecturers' utilization of information communication technology in teaching to quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State.

Research Questions

The following research questions were raised to guide the study:

1. What are the institutional internal-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State?
2. What are the institutional external-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State?
3. What are the lecturers personal-related factors challenging their utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State?
4. What are the impediments of the challenges of lecturers' utilization of information communication technology in teaching towards quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State?

Hypotheses

The following null hypotheses were formulated and tested in the study:

1. There is no significant difference in the mean rating of HODs and lecturers on the institutional internal-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State.
2. There is no significant difference in the mean rating of HODs and lecturers on the institutional external-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State.
3. There is no significant difference in the mean rating of HODs and lecturers on their personal-related factors challenging their utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State.
4. There is no significant difference in the mean rating of HODs and lecturers on the impediments of the challenges of lecturers' utilization of information communication technology in teaching to quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State.

Research Method

The descriptive survey research design was employed in order to conduct the study. This design was employed in order to conduct a field survey and gather data (information) from the participants that is, HODs and lecturers from Nnamdi Azikiwe University, Awka, Anambra State. Justification for the choice of the descriptive survey research design is that; this design enabled the researchers to undergo a field study in order to collect data from a sample of large population of HODs and lecturers; and

thereafter, generalize the findings in order to draw inferences and make conclusion. Population for the study consisted of all the 1,964 Heads of Departments (HODs) and lecturers within 91 Departments from 14 Faculties in Nnamdi Azikiwe University (NAU), Awka, Anambra State. According to the Personnel Unit (Pay Roll), NAU (2022), there are a total of 1,964 academic staff strength within 91 Departments and 14 Faculties in NAU, Awka, Anambra State. Justification for choosing only the HODs and lecturers in this present study was because the study in particular concerns to them mostly, therefore, they were in a better position to describe the challenges inhibiting their utilization of ICT in teaching and how these challenges caused impediments to quality e-learning uptake among students of NAU, Awka, Anambra State. The sample size for the study comprised a total of 1,440 participants, incorporating 65 HODs and 1,375 lecturers selected from 14 Faculties in the university (NAU). The sample were selected using the stratified random sampling technique.

The stratified random sampling technique was employed to select the HODs and lecturers (that is, academic staff) according to their different positions, based on head of department and lecturer position. Here, the researchers randomly selected 70% of both the HODs and lecturers from their entire population from the university. To carry out this technique in this present study, it was convenient for the researchers to study and select samples from the entire elements that make up the population in the NAU based on their different positions (either, HOD or lecturer) and they could as well as be easily reached out by the researchers using the support of some research assistants. A researchers' self-developed questionnaire titled: Challenges to Lecturers Utilization of ICT in Teaching and Impediments to Quality E-Learning Uptake Questionnaire (CLUICTTIQELUQ) which was constructed for HODs and lecturers, containing 42 items and designed on a 4-point scale, was used for data collection in the study. Construction of the questionnaire was guided by the scope of the study, purpose of the study and research questions. The questionnaire was divided into two parts. Part A is an introductory section which comprised personal details and open-ended statements that elicited from the participants their positions as either HOD or lecturer and designated Faculty in NAU. Part B of the research instrument contained 42 items based on this study on Examination of the Challenges to Lecturers Utilization of Information Communication Technology in Teaching and Impediments to Quality E-Learning Uptake among Students of Nnamdi Azikiwe University, Awka, Anambra State. Items in section B of the instrument was arranged in four clusters in order to answer questions relating to each of the research questions. The items on the CLUICTTIQELUQ was structured on a 4-point scale weighted as follows: (a) Strongly Agree **(SA) - 4**, Agree **(A) - 3**, Disagree **(D) - 2,** Strongly Disagree **(SD) - 1** for answering all the research questions. The research instrument was validated by two experts from Educational Management and Policy Department and one expert from Measurement and Evaluation Unit, Faculty of Education, Nnamdi Azikiwe University, Awka, Anambra State. The corrections and modifications made by these experts were incorporated in the instrument before the final draft of the instrument. This is done in order to determine the face and content validity that aided the instrument to collect the requisite information/data for the study. These experts were requested to face validate the items in the questionnaire in terms of their face value, content relevance, items clarity and sentence construction. Reliability of the questionnaire was established through a pilot-test sampling 5 HODs and 25 lecturers from one federal university in Enugu State, which was not part of the study. After the pilot test, the result obtained from the data collected were computed and the coefficient value were measured using the Cronbach Alpha formula to appraise the reliability of the research instrument. The scores gave

coefficient reliability of 0.85, 0.83, 0.76 and 0.87 for the four clusters respectively. These scores were added up and divided to give an overall internal consistency reliability value of 0.82, showcasing that the questionnaire was reliable and trustworthy. This is equally to show the degree at which the instrument was liable to collect the necessary information for the study.

Method of data collection entailed the adoption of direct, personal and hand delivery process with the respondents using five research assistants. A face-to-face contact method and on-the-spot method was deployed in this process in order to collect the necessary information from the respondents to ensure maximum recovery of the questionnaire administered. Copies of the questionnaire for the HODs and lecturers were delivered to them by the researchers and research assistants who were postgraduate students of NAU, Awka. These research assistants were instructed and briefed on how to administer the questionnaire to the respondents. This entailed explaining properly to the research assistants' the reason for the study, likewise, the location of the Faculties and departments selected for the study. The researchers and the research assistants waited for the respondents to complete the questionnaire before retrieving them on the spot in order to obtain the highest possible rate of return. A period of three weeks' time frame duration was given for the distribution and collection of all the copies of the questionnaire distributed to the respondents by the research assistants. A total of 1,440 copies of the questionnaire were distributed and all were retrieved at a 100% rate of return. Data collated for the study were analyzed using mean scores and standard deviation in order to answer all the research questions. Data analyzed were equally represented in tables. The decision rule for determining the challenges to lecturers' utilization of information communication technology in teaching and impediments to quality e-learning uptake among students of Nnamdi Azikiwe University (NAU), Awka, Anambra State, was rated of 2.50 and above. Only mean scores of that rated 2.50 and above was accepted as an indication of agreeing with the statement while mean scores below 2.49 was regarded as an indication of disagreeing with the statement. The hypotheses were tested at an alpha level of 0.05 significance using the t-test statistics. The t-test statistics was used to test the significant difference between two mean distributions as showcased in the hypotheses. The hypotheses were tested at an alpha level or significance level of 0.05. For the hypotheses testing, the decision rule was that wherever p-value obtained or calculated value was greater than or equal to the alpha 0.05 level of significance, the null hypothesis – H_0 was not rejected (accepted). On the other hand, a null hypothesis – H_0 was rejected wherever an obtained or calculated *p*-value was less than the alpha 0.05 level of significance. Data collated were also be coded into the SPSS (Statistical Software Package for Social Sciences) for computer analysis.

Research Question 1: What are the institutional internal-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State?

Table 1: Institutional Internal-Based Factors Challenging Lecturers' Utilization of Information Communication Technology in Teaching Institutional: N = (65 HODs and 1,375 lecturers)

S/N	STATEMENT: Institutional internal-based factors challenging lecturers' utilization of ICT in teaching includes:	HODS			LECTURERS		
		X	SD	Decision	X	SD	Decision
1.	Lack of support from institution's management which challenges utilization of ICT in teaching	3.40	0.76	**Agree**	2.61	1.06	**Agree**
2.	Institution's inability to constantly provide technical support through expertise training to encourage lecturers utilization of ICT in teaching	2.95	0.87	**Agree**	2.81	1.09	**Agree**
3.	Hike in students' population/over enrolment which makes it difficult for utilization different ICTs in teaching	2.66	0.90	**Agree**	2.82	1.03	**Agree**
4.	Lack of preparedness on the part of institution's administrators which challenges utilization of ICT in teaching	2.92	1.01	**Agree**	2.87	0.96	**Agree**
5.	Institution's inability to mobilize sufficient ICT resources/equipment which challenges their utilization in teaching	2.95	1.04	**Agree**	3.21	0.93	**Agree**
6.	Poor maintenance of ICT infrastructure including equipment by the institution's management which also challenges their utilization in teaching	2.88	0.87	**Agree**	2.95	1.01	**Agree**
7.	Institution's inability to mount efficient Local Area Network (LAN) in the ICT centre which makes it difficult for utilization of ICT resources in teaching	3.03	1.08	**Agree**	3.10	1.02	**Agree**
8.	Poor implementation of properly developed ICT-based curricular contents in the institution	2.85	0.98	**Agree**	2.86	0.91	**Agree**
9.	Institution's leadership inability to persistently solicit support from external sources for procurement of the needed ICTs in the university	2.97	0.88	**Agree**	2.77	0.96	**Agree**
10.	Institution's administrators' inability to strengthen effective school-community partnership at this higher education level which would make room likewise encourage the utilization of ICT in teaching	2.77	1.05	**Agree**	2.93	0.98	**Agree**
11.	Lack of time allotted to institution's lecture timetable which affects utilization of ICT in teaching	2.02	0.90	**Disagree**	2.31	1.15	**Disagree**
12.	Unpreparedness/unreadiness of students to cooperate with lecturers which challenges the utilization of ICT in teaching	1.98	1.10	**Disagree**	2.35	1.05	**Disagree**
	Grand Mean Score and SD	**2.78**	**1.03**	**Agree**	**2.80**	**1.05**	**Agree**

Field Survey Data (2023)

Result as shown from Table 1 above, from the mean ratings of the HODs and lecturers in NAU indicated that both respondents' responses from items 1 to 10 were rated above 2.50 of the acceptable mean score agreeing with these statements. However, items 11 and 12 were rated below the acceptable mean score of 2.50 by the HODs and lecturers in NAU disagreeing with these two statements. This result showed further that both the HODs and lecturers in NAU were comparable in their response on the institutional internal-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State. The overall (grand) mean score of the HODs and lecturers is 2.78 and 2.80 respectively showcasing that both respondents reacted alike (positively) towards majority of the statements. Their standard deviation (SD) ranged from 0.76 to 1.10 with an overall SD of 1.03 for the HODs; and SD which ranged from 0.91 to 1.15 with an overall SD of 1.05 for the lecturers; showing small disparity in their responses. The standard deviations obtained from the responses to all the items by the HODs (SD = 1.03) and lecturers (SD = 1.05) indicated homogeneity in their responses. There were also no variations in responses of the HODs and lecturers as all the standard deviations ranged from 0.76 to 1.15 for both group of respondents.

Research Question 2: What are the institutional external-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State?

Table 2: Institutional External-Based Factors Challenging Lecturers' Utilization of Information Communication Technology in Teaching: N = (65 HODs and 1,375 lecturers)

S/N	STATEMENT: Institutional external-based factors challenging lecturers' utilization of ICT in teaching includes:	HODS			LECTURERS		
		X	SD	Decision	X	SD	Decision
13.	Poor government funding of university education challenging utilization of ICT in teaching	3.26	0.75	**Agree**	3.22	0.65	**Agree**
14.	Government failure towards effective ICT policy implementation which challenges their utilization in teaching in the university	3.28	0.79	**Agree**	3.12	1.05	**Agree**
15.	Government non-challancy/negative attitude towards utilization of ICT in teaching in the university	3.02	1.02	**Agree**	3.13	0.94	**Agree**
16.	Lack of government financial support for ICT infrastructural development in the university to encourage their utilization in teaching	2.98	0.89	**Agree**	2.90	1.04	**Agree**
17.	Inadequate encouragement through constant supervision from regulatory agency like the NUC which challenges utilization of ICT in the university	2.60	1.09	**Agree**	3.10	1.11	**Agree**
18.	Poor conduct in needs assessment programme to determine the university to determine areas of need for ICT utilization in teaching	2.75	1.18	**Agree**	2.87	0.98	**Agree**
19.	Non-cooperation from non-governmental organization such as financial institutions, immediate community, private industries, business owners, etc, to support the utilization of ICT in teaching in the university	2.89	0.96	**Agree**	2.61	1.04	**Agree**
	Grand Mean Score and SD	**2.97**	**0.99**	**Agree**	**2.99**	**1.00**	**Agree**

Field Survey Data (2023)

Result as shown from Table 2 above, from the mean ratings of the HODs and lecturers in NAU indicated that both respondents' responses from items 13 to 19 were rated above 2.50 of the acceptable mean score agreeing with these statements. None of the items were rated below the acceptable mean score of 2.50 by the HODs and lecturers in NAU to disagree with any of the statements. This result showed further that both the HODs and lecturers in NAU were comparable in their response on the institutional external-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State. The overall (grand) mean score of the HODs and lecturers is 2.97 and 2.99 respectively showcasing that both respondents reacted alike (positively) towards all the statements. Their standard deviation (SD) ranged from 0.75 to 1.18 with an overall SD of 0.99 for the HODs; and SD which ranged from 0.65 to 1.11 with an overall SD of 1.00 for the lecturers; showing small disparity in their responses. The standard deviations obtained from the responses to all the items by the HODs (SD = 0.99) and lecturers (SD = 1.00) indicated homogeneity in their responses. There were also no variations in responses of the HODs and lecturers as all the standard deviations ranged from 0.65 to 1.18 for both group of respondents.

Research Question 3: What are the lecturers personal-related factors challenging their utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State?

Table 3: Lecturers Personal-Related Factors Challenging their Utilization of Information Communication Technology in Teaching: N = (65 HODs and 1,375 lecturers)

S/N	STATEMENT: Lecturers personal-related factors challenging their utilization of ICT in teaching includes:	HODS			LECTURERS		
		X	SD	Decision	X	SD	Decision
20.	Too much workloads which negatively affects utilization of ICT in teaching	2.66	1.00	**Agree**	2.90	1.03	**Agree**
21.	Negative attitude towards the use of ICT which affects their utilization in teaching	2.68	1.12	**Agree**	2.93	0.96	**Agree**
22.	Preference of the old convention lecture teaching methods over utilization of ICT in teaching	2.86	0.86	**Agree**	2.76	0.96	**Agree**
23.	Unpreparedness/laziness of many lecturers including older lecturers which challenges their utilization of ICT in teaching	2.88	0.85	**Agree**	2.96	0.71	**Agree**
24.	Cultural affiliations attached to ICT which affects their utilization in teaching	1.97	1.01	**Disagree**	1.75	0.87	**Disagree**
25.	Lack of computer skills/competency which affects utilization of ICT in teaching	2.86	0.94	**Agree**	2.90	0.93	**Agree**
26.	Economic constraints which inhibits lecturers procurement of their personal ICT gadgets including constant data that will aid their utilization in teaching	3.35	1.00	**Agree**	3.20	0.84	**Agree**
27.	Gender differences in male and female characteristics challenging the utilization of ICT in teaching	2.35	1.04	**Disagree**	2.05	1.00	**Disagree**
28.	Low speed in operating most of these ICT equipment/resources which makes it difficult for their utilization in teaching	2.85	0.77	**Agree**	2.96	0.98	**Agree**
29.	Inability to incorporate ICT in most tasks such as project supervision, research and students' assessments which continues to hinder ICT utilization in teaching	2.77	0.92	**Agree**	2.95	0.87	**Agree**
30.	Poor lecturer initial preparation as student-teacher in the pre-service training institution which challenges their present utilization of ICT in teaching	2.80	1.00	**Agree**	2.79	0.87	**Agree**
31.	Lack of engagement in personal ICT capacity building programmes which challenges lecturers' utilization of ICT in teaching	2.75	0.58	**Agree**	2.70	1.03	**Agree**
32.	Job dissatisfaction on the part of lecturers challenges their utilization of ICT in teaching	2.31	0.99	**Disagree**	1.96	0.77	**Disagree**
	Grand Mean Score and SD	**2.70**	**0.99**	**Agree**	**2.68**	**1.01**	**Agree**

Field Survey Data (2023)

Result as shown from Table 3 above, from the mean ratings of the HODs and lecturers in NAU indicated that both respondents' responses from items 20 to 23, 25, 26 and 28 to 31 were rated above 2.50 of the acceptable mean score agreeing with these statements. However, items 24, 27 and 32 were rated below the acceptable mean score of 2.50 by the HODs and lecturers in NAU disagreeing with these two statements. This result showed further that both the HODs and lecturers in NAU were comparable in their response on the lecturers' personal-related factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State. The overall (grand) mean score of the HODs and lecturers is 2.70 and 2.68 respectively showcasing that both respondents reacted alike (positively) towards majority of the statements. Their standard deviation (SD) ranged from 0.58 to 1.12 with an overall SD of 0.99 for the HODs; and SD which ranged from 0.71 to 1.03 with an overall SD of 1.01 for the lecturers; showing small disparity in their responses. The standard deviations obtained from the responses to all the items by the HODs (SD = 0.99) and lecturers (SD = 1.01) indicated homogeneity in their responses. There were also no variations in responses of the HODs and lecturers as all the standard deviations

ranged from 0.58 to 1.12 for both group of respondents.

Research Question 4: What are the impediments of the challenges of lecturers' utilization of information communication technology in teaching towards quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State?

Table 4: Impediments of the Challenges of Lecturers' Utilization of Information Communication Technology in Teaching to Quality E-Learning Uptake Among Students: N = (65 HODs and 1,375 lecturers)

S/N	STATEMENT: Impediments of these challenges of lecturers' utilization of ICT in teaching to quality e-learning uptake among students includes:	HODS			LECTURERS		
		X	SD	Decision	X	SD	Decision
33.	The poor institution's mobilization of ICT resources for their appropriate utilization in teaching will prevent students' from having wider access to readily available information online that promotes quality e-learning uptake in the university	2.91	0.82	**Agree**	2.89	0.85	**Agree**
34.	The challenges to lecturers' utilization of ICT in teaching does not encourage online collaboration both within and outside the university campus which will aid quality e-learning uptake	2.94	0.94	**Agree**	2.59	1.04	**Agree**
35.	Poor support by government including other external bodies like the financial institutions, etc, seem to prevent students from having adequate access to those computer facilities/resources that will positively impact on quality e-learning uptake in the university	3.22	0.77	**Agree**	3.21	0.92	**Agree**
36.	With the challenge on poor policy implementation, this will inhibit students access to internet facilities that will improve quality e-learning uptake in the university	3.06	0.97	**Agree**	3.25	0.83	**Agree**
37.	The inability to consistently upgrade ICT resources does not avail students' opportunities of been exposed to new emerging technologies such as clouding, LMS, virtual reality, robotics, etc that will make positive impact on their quality e-learning uptake in the university	3.17	0.95	**Agree**	3.34	0.91	**Agree**
38.	Constant erupted/interrupted power supply in teaching would inhibit on lecturers' utilization of ICT which prevents quality e-learning uptake in the university for students	2.88	0.77	**Agree**	3.27	0.80	**Agree**
39.	Poor motivation from the university administrators prevents quality e-learning uptake such as the online teaching in the university for students	3.29	0.87	**Agree**	3.25	0.91	**Agree**
40.	Lecturers' personal challenges to ICT utilization will definitely affect quality e-learning uptake especially in promoting online teaching delivery including e-assessments in the university for students	3.29	0.78	**Agree**	3.15	0.91	**Agree**
41.	The challenges to lecturers utilization of ICT in teaching would prevent quality e-learning uptake such as blended learning for students in the university	3.22	0.98	**Agree**	3.18	0.91	**Agree**
42.	With the challenges to ICT utilization in teaching, students' accessibility to various quality e-learning uptake through various social network including internet apps such as google applications becomes difficult	2.77	0.84	**Agree**	2.93	0.88	**Agree**
	Grand Mean Score and SD	**3.07**	**0.89**	**Agree**	**3.11**	**0.93**	**Agree**

Field Survey Data (2023)

Result as shown from Table 4 above, from the mean ratings of the HODs and lecturers in NAU indicated that both respondents' responses from items 38 to 47 were rated above 2.50 of the acceptable mean score agreeing with these statements. However, none of the items were rated below the acceptable mean score of

2.50 by the HODs and lecturers in NAU to disagree with any of the statements. This result showed further that both the HODs and lecturers in NAU were comparable in their response on the impediments of the challenges of lecturers' utilization of information communication technology in teaching towards quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State. The overall (grand) mean score of the HODs and lecturers is 3.07 and 3.11 respectively showcasing that both respondents reacted alike (positively) towards all the statements. Their standard deviation (SD) ranged from 0.77 to 0.98 with an overall SD of 0.89 for the HODs; and SD which ranged from 0.80 to 1.04 with an overall SD of 0.93 for the lecturers; showing small disparity in their responses. The standard deviations obtained from the responses to all the items by the HODs (SD = 0.89) and lecturers (SD = 0.93) indicated homogeneity in their responses. There were also no variations in responses of the HODs and lecturers as all the standard deviations ranged from 0.77 to 1.04 for both group of respondents.

Test of Hypotheses

HO$_1$: There is no significant difference in the mean rating of HODs and lecturers on the institutional internal-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State.

Table 5: Test of Difference between Mean Ratings of HODs and Lecturers on the Institutional Internal-Based Factors Challenging Lecturers' Utilization of Information Communication Technology in Teaching in Nnamdi Azikiwe University, Awka, Anambra State

Academic Staff	N	Mean	SD	df	t	Sig
HODs	65	44.12	9.10			
				1438	.181	.443
Lecturers	1375	43.93	8.24			

p > 0.05

Data analyzed on Table 5 reveal that t-test was run to test the difference in the mean rating of HODs and lecturers on the institutional internal-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State. The result indicates no significant difference given that t-value = .181 and p > 0.05 (.443 > 0.05), thus, the null hypothesis was accepted that the difference between mean rating of HODs and lecturers on the institutional internal-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State is not significant.

HO$_2$: There is no significant difference in the mean rating of HODs and lecturers on the institutional external-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State.

Table 6: Test of Difference between Mean Ratings of HODs and Lecturers on the Institutional External-Based Factors Challenging Lecturers' Utilization of Information Communication Technology in Teaching in Nnamdi Azikiwe University, Awka, Anambra State

Academic Staff	N	Mean	SD	df	t	Sig
HODs	65	43.84	7.23			
				1438	-.081	.137
Lecturers	1375	43.93	8.24			

p > 0.05

Analysis on Table 6 shows that t-test was run to test the difference in the mean rating of HODs and lecturers on the institutional external-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State. The analysis reveals no significant difference given that t = -0.81, and p > 0.05 (.137 > 0.05), hence, the null hypothesis was accepted that the difference in the mean rating of HODs and lecturers on the institutional external-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State is not significant.

HO$_3$: There is no significant difference in the mean rating of HODs and lecturers on their personal-related factors challenging their utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State.

Table 7: Test of Difference between Mean Ratings of HODs and Lecturers on their Personal-Related Factors Challenging Lecturers' Utilization of Information Communication Technology in Teaching in Nnamdi Azikiwe University, Awka, Anambra State

Academic Staff	N	Mean	SD	df	t	Sig
HODs	65	44.04	8.31			
				1438	-1.643	.551
Lecturers	1375	45.88	8.83			

p > 0.05

Table 7 indicates that t-test was run to test the difference in the mean rating of HODs and lecturers on their personal-related factors challenging their utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State. The result shows no significant difference given that t-value = -1.643 and p > 0.05 (.551 > 0.05), therefore, the null hypothesis was accepted that the difference in the mean rating of HODs and lecturers on their personal-related factors challenging their utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State is not significant.

HO$_4$: There is no significant difference in the mean rating of HODs and lecturers on the impediments of the challenges of lecturers' utilization of information communication technology in teaching to quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State.

Table 8: Test of Difference between Mean Ratings of HODs and Lecturers on the Impediments of the Challenges of Lecturers' Utilization of Information Communication Technology in Teaching in Nnamdi Azikiwe University, Awka, Anambra State

Academic Staff	N	Mean	SD	df	t	Sig
HODs	65	49.84	9.99			
				1438	5.867	.179
Lecturers	1375	43.61	8.29			

p > 0.05

Analyses on Table 8 reveals that t-test was run to test the difference in the mean rating of HODs and lecturers on the impediments of the challenges of lecturers' utilization of information communication technology in teaching to quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State. The results reveal no significant difference given that t-value = 5.867 and p > 0.05 (.179 > 0.05), thus, the null hypothesis was accepted that the difference in the mean rating of HODs and lecturers on the impediments of the challenges of lecturers' utilization of information communication technology in teaching to quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State is not significant.

Discussion of Findings

Findings of this study generally revealed that all the factors investigated as regards to the institutional internal-based factors, institutional external-based factors and lecturers personal-related factors were challenging to lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State. Also, the impediments of the challenges of lecturers' utilization of information communication technology in teaching inhibited quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State. All these were discussed under several subheadings in this section:

Institutional Internal-Based Factors Challenging Lecturers' Utilization of Information Communication Technology in Teaching in Nnamdi Azikiwe University, Awka, Anambra State

This finding indicated that the institutional internal-based factors were challenging to lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State. It was further discovered that these institutional internal-based challenges to lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State included: lack of support from institution's management which challenged utilization of ICT in teaching, institution's inability to constantly provide technical support through expertise training to encourage lecturers' utilization of ICT in teaching, hike in students' population/over enrolment which made it difficult for utilization different ICTs in teaching, lack of preparedness on the part of institution's administrators which challenged utilization of ICT in teaching, institution's inability to mobilize sufficient ICT resources/equipment which challenged their utilization in teaching, poor maintenance of ICT infrastructure including equipment by the institution's management which also challenged their utilization in teaching, institution's inability to mount efficient Local Area Network (LAN) in the ICT centre which made it difficult for utilization of ICT resources in teaching, poor implementation of properly developed ICT-based curricular contents in the institution, institution's leadership inability to persistently solicit support from external sources for

procurement of the needed ICTs in the university, and institution's administrators' inability to strengthen effective school-community partnership at this higher education level which made room likewise encourage the utilization of ICT in teaching. However, such institutional internal-based factors such as: lack of time allotted to institution's lecture timetable in teaching, and unpreparedness/unreadiness of students to cooperate with lecturers, were not among the challenges to the utilization of ICT in teaching in NAU.

This finding agrees and corroborates with Suberu (2013) study which found out that inadequate funding, problem of accessibility, lack of personnel and instructional materials, lack of power supply and maintenance, absence of properly developed curricular for computer teaching, methodologies used in teaching with computers were problems associated with utilizing ICT in teaching in educational institutions. The present study finding also corresponds with Ilaonisi and Osuagwu (2010) study which found out that many institutions internal factors limited infusion and utilization of ICT in educational institutions in Nigeria. They included: paucity of ICT infrastructure and lack of access; high enrolments, inadequate funding and absence of funding allocation to technology; high cost of ownership and cost to the consumer and policy implications of the mismatch between the advertised capabilities of ICT technology and the aims of individual educational institutions. Findings of Nwana (2012) study on the challenges in the application of e-learning by secondary school teachers in Anambra State, Nigeria discovered that: acute shortage of e-learning materials such as on-line/internet-connected computers, e-mail facilities, multimedia television, multimedia computer and digital library were challenges to utilization of ICT in schools. As part of the institutional factors challenges, Ogueche and Nri (2021) study found out that in many schools there were not enough computer for students, in most cases the ratio of computer is 10:1 which made teaching and learning very much inefficient and ineffective for the teacher and the students respectively. Ogueche and Nri (2021) study further confirmed that the level of ICT implementation and integration in secondary education is rather low due to a lack of administrative will to address ICT challenges. ICT facilities were very limited. Edumark (2014) confirmed that the absence of (computer) school physical facilities were among the challenges which hindered the use of ICT in teaching and learning. Studies from Garba and Onyebuchi (2015) confirmed that the factors affecting the teaching with computers in schools include; lack/insufficient computer laboratory, lack of motivation, poor school environment, non-availability of instructional materials and facilities, insufficient or non-supply of power, lack of incentive to motivate teachers, non-commitment by the school manager, content of the curriculum, poor standard of living, poor funding, poor implementation of government policies, among others. In line with the above findings, studies of Edumark (2014), Garba and Onyebuchi (2015), and Ogueche and Nri (2021), Emengini, Igwe, Anyanwu, Okeke-James and Iwundu (2021) found out that utilization of school facilities can be explained in terms of the consultation and use of these facilities by staff and students as they interface with each other in the classroom, (computer) science laboratories and as they go to the libraries to research and do their assignment. However, there seem to be a situation where school facilities were in place but students did not regularly utilize them to facilitate their learning. Other challenges include lack of adequate access to technical support by school administration in schools. Habibu, Al-Mamun and Clement (2012) study found out that poor integrate of ICT into teaching-learning process even though with difficulties coupled with other major barriers such as lack of genuine software, inadequate computer in the classroom, poor administrative support, poor course curriculum, etc were among the institutional internal factors that hinder utilization of ICT in teaching and

learning. The hypothesis test further indicated that the difference in the mean rating of HODs and lecturers on the institutional internal-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State is not significant. This finding means that both the HODs and lecturers do not differ in their responses.

Institutional External-Based Factors Challenging Lecturers' Utilization of Information Communication Technology in Teaching in Nnamdi Azikiwe University, Awka, Anambra State

The finding of this study indicated that institutional external-based factors were challenging to lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State. Furthermore, this finding indicated that these institutional external-based challenges to lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State included: poor government funding of university education challenging utilization of ICT in teaching, government failure towards effective ICT policy implementation which challenges their utilization in teaching in the university, government non-challancy/negative attitude towards utilization of ICT in teaching in the university, lack of government financial support for ICT infrastructural development in the university to encourage their utilization in teaching, inadequate encouragement through constant supervision from regulatory agency like the NUC which challenges utilization of ICT in the university, poor conduct in needs assessment programme to determine the university to determine areas of need for ICT utilization in teaching, and non-cooperation from non-governmental organization such as financial institutions, immediate community, private industries, business owners, etc, to support the utilization of ICT in teaching in the university. This finding corresponds and is equally in line with Obidile and Onyeagba (2019) study which found out that institutional external-based factors in connection with political barriers due to political administrators attitude towards implementation of ICT in education, poor government attitude towards ICT policy implementation in the university coupled with lack of support in the procurement and maintenance of ICT facilities by external sources and support such as financial institutions, private individuals, parents, international organizations and other non-governmental organizations to aid lecturers' utilization of ICT in the university, inhibited utilization of ICT in the universities. Ogbomo (2011) and Ogueche and Nri (2021) studies confirmed that government failure to effectively implement ICT policy in Nigerian educational institutions coupled with insufficient educational technology infrastructure, national telecommunications and information infrastructure has continued to hinder its utilization. Faben and Nwaokwa (2016) study discovered that such factors as; inadequate funding of education, inadequate provision of funds for relevant facilities, lack of strong government policies on e-learning adoption by lecturers, inadequate provision for technical training of lecturers, lack of vision for e-learning adoption in schools, inadequate technical support from government, lack of legal and regulatory framework for e-learning, lack of political will to drive e-learning adoption, lack of support to local ICT firms, failure to recruit ICT experts for schools, and failure to regulate the activities of internet service providers; were among the government-related factors which constrained the use of ICT and e-learning in the colleges. The hypothesis test further indicated that the difference in the mean rating of HODs and lecturers on the institutional external-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State is not significant. This hypothetical

finding means that both the HODs and lecturers do not differ in their responses.

Lecturers' Personal-Related Factors Challenging their Utilization of Information Communication Technology in Teaching in Nnamdi Azikiwe University, Awka, Anambra State

It was discovered through one of the findings that the lecturers' personal-related factors were challenging to lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State. This finding further revealed that the lecturers' personal-related challenges to their utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State included: too much workloads which negatively affected utilization of ICT in teaching, negative attitude towards the use of ICT which affected their utilization in teaching, preference of the old convention lecture teaching methods over utilization of ICT in teaching, unpreparedness/laziness of many lecturers including older lecturers which challenged their utilization of ICT in teaching, lack of computer skills/competency which affected utilization of ICT in teaching, economic constraints which inhibited lecturers procurement of their personal ICT gadgets including constant data that aided their utilization in teaching, lack of computer skills/competency which affected utilization of ICT in teaching, economic constraints which inhibited lecturers procurement of their personal ICT gadgets including constant data that aided their utilization in teaching, low speed in operating most of these ICT equipment/resources which made it difficult for their utilization in teaching, inability to incorporate ICT in most tasks such as project supervision, research and students' assessments which continue to hinder ICT utilization in teaching, poor lecturer initial preparation as student-teacher in the pre-service training institution which challenged their present utilization of ICT in teaching, and lack of engagement in personal ICT capacity building programmes which challenged lecturers' utilization of ICT in teaching. Moreover, challenges such as cultural affiliations attached to ICT, gender differences in male and female characteristics, and job dissatisfaction on the part of lecturers did not challenge lecturers' utilization of ICT in teaching. This finding corroborates with Ogueche and Nri (2021) on the challenges in the teaching and learning of computer studies in rural secondary schools in Igboeze North L.G.A. of Enugu State whose findings indicated some of the ICT utilization challenges as teachers and students' lack of competence in basic computer applications and procedures. It was found out that secondary school teachers in Igboeze North L.G.A, Enugu State, were unable to teach computer courses because most teachers did not have basic computer skills and most schools lacked basic computer facilities. Habibu, Al-Mamun and Clement (2012) confirmed in the finding of their study that low speed internet, lack of computers skills, lack of proper training, lack of skilled personnel to train teachers, shortage of training, lack of motivation from both teacher and student side to use ICT, lack of proper training skills, unavailability of latest ICT equipment, lack of expert technical staff, shortage of proper equipment and delay to purchase equipment were the remarkable causes that made it difficult to use ICT in the teaching-learning process. The other important reason behind teacher's failure to use modern technology for effective teaching-learning process was job dissatisfaction. Their initiative, creativity, inventiveness became indolence because of job satisfaction. But the present study finding differed and deviated with Habibu, Al-Mamun and Clement (2012) study on this particular aspect. Supporting the above findings, Nwana (2012) found out and confirmed that the few available ICTs such as off-line/ordinary computers, scanner, printer and ready-made courseware were not utilized because the teachers lack the knowledge and skills of computer application. The only material identified as available

and in use was the telephone. The hypothesis test indicated that the difference in the mean rating of HODs and lecturers on their personal-related factors challenging their utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State is not significant. Meaning that both the HODs and lecturers do not differ in their responses.

Impediments of the Challenges of Lecturers' Utilization of Information Communication Technology in Teaching to Quality E-Learning Uptake Among Students of Nnamdi Azikiwe University, Awka, Anambra State

It was discovered through this finding that the impediments of the challenges of lecturers' utilization of information communication technology in teaching inhibited quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State. The finding further revealed that the poor institution's mobilization of ICT resources for their appropriate utilization in teaching prevented students' from having wider access to readily available information online that promotes quality e-learning uptake in the university. The challenges to lecturers' utilization of ICT in teaching did not encourage online collaboration both within and outside the university campus to aid quality e-learning uptake. Poor support by government including other external bodies like the financial institutions, etc, seem to prevent students from having adequate access to those computer facilities/resources that positively impact on quality e-learning uptake in the university. It was further discovered that with the challenge on poor policy implementation, this inhibited students' access to internet facilities that improved quality e-learning uptake in the university. Also, the inability to consistently upgrade ICT resources did not avail students' opportunities of been exposed to new emerging technologies such as clouding, LMS, virtual reality, robotics, etc that made positive impact on their quality e-learning uptake in the university. Constant erupted/interrupted power supply in teaching inhibited lecturers' utilization of ICT which prevented quality e-learning uptake in the university for students. Poor motivation from the university administrators prevented quality e-learning uptake such as the online teaching in the university for students. Lecturers' personal challenges to ICT utilization definitely affected quality e-learning uptake especially in promoting online teaching delivery including e-assessments in the university for students. The challenges to lecturers' utilization of ICT in teaching prevented quality e-learning uptake such as blended learning for students in the university. With the challenges to ICT utilization in teaching, students' accessibility to various quality e-learning uptake through various social network including internet apps such as google applications became difficult.

This finding agrees with the findings of Faben and Nwaokwa (2016) study on institutional and government related factors constrain on e-learning adoption by business education lecturers in colleges of education in North Central Nigeria which indicated that different institutional and government-related factors constrained the adoption of e-learning by the business education lecturers to a high extent. It was found out that such institutional-related factors as: high cost of internet equipment (infrastructure), high cost of e-learning-related software, lack of installation of a campus-wide wireless internet access, non-availability of an ICT centre, insufficient funds for the development of e-learning infrastructure, lack of managerial experience in e-learning, high cost of internet connectivity (fees), lack of staff sponsorship to attend software and internet training short courses, lack of management vision for e-learning, lack of technological experts to handle the computer systems, poor institutional power supply, low management commitment for e-learning, shortage of qualified staff with capacity in e-learning application, poor management and

maintenance of available resources for e-learning, shortage of e-learning hardware and software, poor internet connectivity, inadequate funding of programmes and e-learning related activities, inadequate facilities and infrastructure for e-learning application, lack of adequate incentives and motivation of staff, lack of administrative support/initiative at departmental level; constrained the use of e-learning in the colleges. Based on the findings, the researchers concluded that institutional and government-related factors were major factors responsible for low e-learning adoption by business education lecturers in the zone. These factors inhibited adoption of e-learning in the colleges of education investigated. The present study finding also concurs and equally agrees with Mutisya and Makokha (2016) study on the challenges affecting adoption of e-learning in public universities in Kenya which found out that lecturers ranked heavy workloads as the most serious challenge affecting the adoption of e-learning, followed by: insufficient Internet connectivity, denial of copyrights for their developed e-learning modules, limited information and communication technology (ICT) skills, lack of incentives, shortage of computers/laptops, inadequate computer laboratories, and insufficient time for online interaction. Students, on the other hand, ranked insufficient Internet connectivity the number one challenge, followed by: lack of computers/laptops, inadequate computer laboratories, limited ICT skills, and insufficient time for online interaction. The study concluded that as a result of these challenges, the adoption of e-learning was slow and still at its infancy stage in public universities in Kenya. The finding of this present study is equally in line and concurs with studies like those of Adeoye et al (2020), Ja'ashan (2020), Mutisya and Makokha (2016) and Tugwell and Maduabuchukwu (2020) which found out that e-learning assisted students to construct their own learning through undistracted involvement in educational activities online. Furthermore, the challenges to lecturers' utilization of different ICT resources in teaching caused an impediment to quality e-learning uptake among students, therefore, creating difficulties and preventing the university students to collaborate among themselves in order to find solutions to real life issues as they do not have wider accessibility to readily available information online.

It was also found out that with the challenges to lecturers' utilization of ICT in teaching, students' online collaboration both within and outside the university campus become difficult and impossible which is equally an impediment to quality e-learning uptake among students. Also, it was difficult and students were unable to use different e-learning instructional approaches and modes such as video, audio, text, graphical designs, Learning Management System (LMS) and cloud computing in any online teaching session for quality instructional delivery; including the use of various google applications as google meet, google classrooms, google calendar, google hangouts, google drive for cloud storage, and other online collaborative tools which promoted e-learning among students in the university for quality e-learning uptake that will enhance students learning. More so, quality e-learning uptake which encouraged students and lecturers' collaborations in aspects of promoting online teaching and learning, academic assessment of students, project supervision and research coupled with the use of blended learning teaching methodologies with technologies was also challenging and difficult. The hypothesis test indicated that the difference in the mean rating of HODs and lecturers on the impediments of the challenges of lecturers' utilization of information communication technology in teaching to quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State is not significant. This hypothetical finding means that both the HODs and lecturers do not differ in their responses. This hypothesis corroborates with Faben and Nwaokwa (2016) study which confirmed that institution

ownership and experience did not significantly influence the respondents' opinions on the subject matter on factors that inhibited e-learning adoption by business education lecturers in colleges of education in the zone. Whereby there existed some impediments of the challenges to lecturers' utilization of ICT in teaching, this inhibited quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State.

Conclusion

The information communication technology has made significant impact in the teaching and learning in the university. For many universities with high ICT integration, this has enable them promote quality e-learning uptake among students. But the present study submits and conclude that factors such as institutional internal-based factors, institutional external-based factors, and lecturers' personal-related factors, were challenging to lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State. More so, the impediments from all these challenges of lecturers' utilization of ICT in teaching inhibited quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State. As such, the differences in the mean rating of HODs and lecturers on all these factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University, Awka, Anambra State was not significant. This situation calls for absolute redress if quality education must be enhanced in the teaching and learning situation of NAU. Thus, the recommendations made below.

Recommendations

Based on the findings of this study, the following recommendations has been proffered:

1. The institutional head, that is, the Vice-Chancellor working together with other university officials and backing from the National Universities' Commission (NUC) should employ workable/strategic plans through adequate mobilization of the ICTs and installation of Local Area Network (LAN), deployment of efficient maintenance culture for the ICT infrastructure, promotion of ICT-based instructions, among others, in order to curb the institutional internal-based factors challenging lecturers' utilization of information communication technology in teaching in Nnamdi Azikiwe University (NAU), Awka, Anambra State.
2. The government through NUC should provide adequate financial support to the university in order to curb the institutional external-based factors challenging lecturers' utilization of information communication technology in teaching in NAU, Awka, Anambra State. However, the Vice-Chancellor should also build strong synergy with the non-governmental organizations, private sector and individuals which will accord external support towards infusion of different ICTs into the system.
3. Constant computer capacity building programmes should be organized for lecturers to boost their proficiency and competency in utilizing the ICTs likewise, to control the personal-related factors challenging lecturers' utilization of information communication technology in teaching in NAU, Awka, Anambra State.
4. There should be strong inhibiting curb all these challenges of lecturers' utilization of ICT in teaching inhibited quality e-learning uptake among students of Nnamdi Azikiwe University, Awka, Anambra State.

Contribution to Knowledge

This present study has contributed to knowledge in several ways. The study has exposed educational practitioners, leadership and academics such as the Vice Chancellors and all other administrative heads in NAU to various factors such as the institutional internal-based factors, institutional external-based factors and lecturers personal-related factors

challenging lecturers' utilization of information communication technology in teaching in NAU, Awka, Anambra State; therefore, causing impediments to quality e-learning uptake among students in the university. Lecturers' sufficient utilization of the ICTs which are valid and result oriented as reaffirmed in the present study will definitely assist them to solve their teaching-learning challenges in NAU. The overall contribution of knowledge of this study therefore, is that, it has reaffirmed and exposed the significance, importance, positive contributions and advantages of lecturers' utilization of different ICTs in the teaching delivery for quality e-learning uptake among university students.

Acknowledgements

The researchers would like to acknowledge and express their warm gratitude likewise appreciation to TETFUND whose financial sponsorship towards supporting Institutional Based Researches (IBR) and academic journal publications for academic staff has made it possible for this research to be conducted and published for the entire public view and consultations for the promotion of effective teaching delivery and quality e-learning uptake among University students especially, in Nnamdi Azikiwe University, Awka, Anambra State.

References

Adeoye, I.A., Adanikin, A.F. & Adanikin, A. (2020). COVID-19 and e-learning: Nigeria tertiary education system experience. *International Journal of Research and Innovation in Applied Science, 5* (5), 28-31.

Chukwuma, E. T. C. & Aniekwe, M. G. (2011). The role of ICT centres in enhancing quality instructions and effective service delivery in Nigerian colleges of education (NCE). *Journal of Educational Studies and Research, 6* (2), 77-90.

Edumark, M. (2014). *School locational strategy in dispersed population*. Enugu: Edumark publication Limited.

Emengini, B., Igwe J.A, Anyanwu J.A., Okeke-James, J.N. & Iwundu, S.P. (2021). School facility planning as determinant of students' utilization of education resources in public secondary schools. *International Journal of Multidisciplinary Education and Research, 6* (2),1-6.

Eze, S.C., Chinedu-Eze, V.C. & Bello, A.O. (2018). The utilization of e-learning facilities in the educational delivery system of Nigeria: A study of M-University. *International Journal of Educational Technology in Higher Education, 15* (34), 1-20.

Faben, J.I.E. & Nwaokwa, E.O. (2016). Institutional and government related factors constrain on e-learning adoption by business education lecturers in colleges of education in North Central Nigeria. *International Journal of Innovative Research in Education, Technology & Social Strategies, 3* (1), 1-11. http://www.internationalpolicybrief.org/.pdf.

Federal Republic of Nigeria (2014). *National Policy on Education, 6th Edition*. Lagos: NERDC.

Garba, N.O. & Onyebuchi, D.N. (2015). *Computer science: A problems solving approach*. A Paper presented at the annual teacher's forum, Nnewi North Education zone.

Habibu, T., Al-Mamun. A. & Clement, C. (2012). Difficulties faced by teachers in using ict in teaching-learning at technical and higher educational institutions of Uganda. *International Journal of Engineering Research & Technology (IJERT), 1* (7), 1-10. http://www.ijert.org/.

Iloanusi, N.O. & Osuagwu, C.C. (2010). An evaluation of the impact of ICT diffusion in Nigeria's higher educational system. *Journal of Information Technology Impact, 10* (1), 25-34.

Ja'ashan, M.M.N.H. (2020). The challenges and prospects of using e-learning among EFL students in Bisha University. *Arab World English Journal, 11* (1) 124-137. https://dx.doi.org/10.24093/awej/vol11no1.11.

Mutisya, D.N. & Makokha, J.L. (2016). *Challenges affecting adoption of e-learning in public universities in Kenya*. https://journals.sagepub.com/doi/epub/10.1177/2042753016672.

Nwana, S. (2012). *Challenges in the application of e-learning by secondary school teachers in Anambra State,* Nigeria. https://journal.lib.uoguelph.ca/index.php/ajote/.

Obidile, J.I. & Onyeagba, J.N. (2019). Business education in the e-world: Challenges and the way forward. *US-China Education Review*, 9 (6), 267-272. https://www.researchgate.net/publication/339648398.

Ogbomo, E.F. (2011). Issues and challenges in the use of information communication technology (icts) in education. *Journal of Information and Knowledge Management, 2* (1), 1-19.

Ogueche, I.C. & Nri, P.O. (2021). Challenges in the teaching and learning of computer studies in rural secondary schools in Igboeze North L.G.A. of Enugu State. *Journal of Educational Research and Policy Studies (ESCJERPS), 2* (2), 55-76. https://journal.escetjerps.com/.

Olosunde, G. R. & Akinpelu, S. O. (2010). ICT education and sustainable development: Issues and challenges. In N. S. Talla, M. H. Mohammed, S. A. E. Apara & E. O. Ogungbe (Eds.). *Education for sustainable development in Nigeria.* Niger State: Faculty of Education and Arts, IBB University, Lapai.

Otuka, J.O.E. (2010). *e-learning in Nigeria: Problems and prospects.* A keynote address presented at the 2010 Annual Conference of the Faculty of Education. Enugu: Nnamdi Azikiwe University, Awka.

Suberu, O.S. (2013). *Introduction to computer technology in schools*. Owerri: Assumpta Printing Press.

Tugwell, O.T. & Maduabuchukwu, A.P. (2020). Impediments to effective utilization of e-learning platforms for quality teaching and learning in universities in Niger-Delta, Nigeria. *International Journal of Innovative Research & Development, 9* (7), 128-133. https://www.researchgate.net/publication/343750125.

Yuen, A., Law, N. & Wong, K. (2003). ICT implementation and school leadership case studies of ICT integration in teaching and learning. *Journal of Educational Administration, 41* (2), 158-170.