

EVALUATION OF LECTURERS' LEVEL OF ACCEPTANCE AND USE OF E-LEARNING IN HIGHER INSTITUTION IN A PERIOD OF ECONOMIC UNCERTAINTY

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Abstract

It is a known fact that the uncertainty in the economy which was caused by dreadful scenes like COVID-19 pandemic, insecurity in Nigeria and inter-tribal wars has in one way or the other affected our educational system. This has compelled the entire world, especially at higher education institution levels to rely on e-learning for education. This study aimed at evaluating the lecturers' level of acceptance, usage and challenges encountered in the use of e-learning in higher institutions in Anambra State. Four research questions guided the study. The population for the study consisted of all the lecturers in the Faculty of Education/schools in two Federal Higher Institutions in Anambra State. The sample comprised 200 lecturers obtained through simple random sampling technique. A descriptive survey design was adopted in the study. An instrument titled Lecturers' Acceptance of E-learning Questionnaire (LAEQ) was used to generate data. The data generated were analyzed using mean and standard deviation .The findings revealed among others that insufficient basic e-learning facilities, incompetence in digital/information technology skills and financial challenges in Nigeria have affected the acceptance of e-learning in higher education institutions. It was therefore recommended that the lecturers also should be sensitized on the use of online learning through series of workshops.

Keywords: acceptance; economic uncertainty; e-learning; evaluation; usage

Introduction

In every nation, there is always a constant search for improvement in the quality of education. Since an educational system addresses the problems of the society, there is need to welcome any development that would bring about positive changes. In Nigeria, especially the institution of higher learning, uncertainty has caused them to adopt various changes which have

helped in making the learning process more efficient, effective and convenient. This is a good step for higher institutions of learning to strategize and explore an alternative which is e-learning.

E-learning is a system that is based on formalized teaching but with the help of electronic resources. It is the type of learning where electronic technologies are utilized to access educational curricula outside the conventional classroom. E-learning according to Ugwu and Aleke (2012), is the use of electronic technology to deliver education and training applications. Through this system, lecturers can create, upload and deliver course materials. According to Al Suwailem (2018), e-learning is a type of electronically distributed guidance that promotes learning through resources such as web-based workshops, web tutorials, discussion boards, online reviews, and more. The platform could be easily accessible regardless of your location, thereby making teaching and learning simpler, easier, and more effective. Areen et al (2023) opined that self-paced instruction, asynchronous facilitator-led instruction in which students and teachers interact at different times, and synchronous facilitator-led instruction in which students and teachers interact at the same time are all examples of e-learning. With the use of e-learning, lecturers can conveniently teach from any location through the use of computers and different e-learning platforms like Learning Management System (LMS) etc. Students' performance can equally be assessed and their participation also monitored. A large number of students with different cultural and educational background could be reached too. E-learning helps create and develop human capabilities. For instance, if teachers and students in the Higher Institutions are better trained using e-learning tools for delivering lectures, they become more innovative (Agostini and Nosella, 2020). Also, the shift from conventional classroom learning to e-learning is an important transformation for both the learning model and Higher Institutions (Saheed et al. 2019). During this uncertainty in our economy, e-learning system can develop Higher Education Institutions that are open to learning and can be fully adopted when there is availability of e-learning facilities.

Availability of e-learning facilities seems to be a challenging issue in tertiary institutions. Electronic learning (e-learning) facilities could be described as the use of digital technologies such as electronic boards, internet, projector, computer, application software for delivering teaching, presentation, research and publication activities particularly in higher educational system. The Federal Republic of Nigeria (FRN) has envisioned a role for e-learning in its educational system, when, through its National Policy on education, it promised the development and promotion of effective use of "innovative materials in schools" and had also promised facilities and the required infrastructure to promote Information Communication Technology (ICT) and e-learning (FRN, 2014). Sam (2011) also identified infrastructure availability as the bane of e-learning in Nigeria especially with the epileptic power supply situation compounded by lack of access to technology. Looking at the overwhelming benefits of e-learning, there is need to find out if the lecturers are ready to accept the system because non-compliance will affect the smooth running of the academic activities in this period of economic uncertainty.

Acceptance of e-learning facilities could refer to consenting to receive or accept the innovations of electronic learning facilities for carrying out academic activities. Acceptance of technology could influence the way teachers use it. In other words, if they have negative dispositions towards ICTs, they are unlikely to integrate and adapt ICTs in their teaching,

researching, presenting and publishing activities. Acceptance of e-learning facilities is as a result of the emergence of ICTs and internet connectivity has improved user's ingenuity and opportunities. Rosnaini and Mohd-Arif, (2010) show that a minority of teachers were knowledgeable in basic ICT. However, some of them only averaged a minimal knowledge in ICTs. This scenario clearly shows that the key factor in making ICT programs successful in school is to upgrade the level of ICT knowledge among teachers (Moganashwari and Parilah, 2013). Technology has become a vital element for universities and there is need for lecturers to accept, equip and acquaint themselves with the necessary skills needed to adjust to the changes brought about by technology. This will make the usage of e-learning easy.

E-learning facilities skills are therefore important for lecturers in order to utilize software tools and flexibly adapt to change in ICT infrastructure and applications (UNESCO, 2014). Adequate professional development for lecturers on the adoption of technology in their academic activities will empower them to use the tool to improve their job effectiveness. It is expected that lecturers should not only be able to use ICTs but become comfortable in using them if they are to participate fully in the contemporary tertiary institution life and perform their everyday tasks and be satisfied on their job (Okocha and Odinko, 2023). Despite the benefits of this system, it seems that many still do not know how to use e-learning facilities for their teaching. This may be one of the challenges in the use of the platform.

Although Higher Institutions may be better situated in the use of e-learning however, several factors may influence the acceptance and use of e-learning in Higher Education Institutions. Some of these constraints may relate to insufficient funds, inadequate supply of electricity and e-learning materials among others (Asogwa, 2018). In Nigeria, education is exceptionally underfunded. The educational budget by the Federal government in the last ten years has represented an average of 5.17 per cent compared to other Sub-Saharan Africa countries (Nwokolo, Allu and Rabi, 2017). This is the basis for the study that sought to evaluate the lecturers' level of acceptance and usage of e-learning in teaching.

Evaluation is a purposeful, systematic collection and analysis of information used for documenting the effectiveness and impact of programmes or policies, establishing accountability and identifying areas needing change and improvement. According to Cronbach (1979), evaluation is the quantitative and qualitative description of the extent to which the learners achieve instructional objectives. Cronbach (1979) sees evaluation as a continuous and systematic process administered at regular intervals and which underlines all good teaching and learning processes. Process evaluation monitors the implementation process. The aim is to document the process and provide feedback regarding the extent to which the planned activities are carried out and whether there should be an adjustment. The purpose is also to assess the extent to which participants accept or carry out their roles. Process evaluation provides opportunities for periodically assessing the extent to which the policy is being carried out appropriately and effectively (Zhang, Zeller, Griffith, Metcalf, William, Shea and Misulus, 2011). The primary purpose of doing evaluation is to generate reliable information to improve your programme and services to your clients. Evaluation can provide data on whether a programme works and why, which parts of it are effective and which need improvement, whether it is the best use of your organization's scarce resources. Evaluation of this study becomes necessary because it will help

to identify the extent to which e-learning facilities are available, accepted and used by the lecturers in discharging their duties. Programmes at Higher Education Institutions are continuous, therefore process evaluation was adopted for the study, hence the adoption of the Context-Input-Process-Product model developed by Stufflebeam in 1971 (Stufflebeam, 2001).

There have been several studies on the use of e-learning in Higher Education Institutions. Emmanuel, Igwe and Atsumbe (2012) examined the accessibility and use of e-learning structures in one of the Nigerian public universities. The study specifically looked at the adequacy of e-learning infrastructures for teaching and learning; the capacity of the e-learning facilities to teaching, learning and interactions among teachers and students, as well as the factors that hinder the utilisation of e-learning facilities. The outcome of the findings showed that there are poor facilities specifically directed towards teaching and learning. There have been several studies on the utilization of e-learning facilities. Academic staffs of universities still actively resist the use of modern technology in teaching (Ndibalema, 2014). This could suggest that they are more comfortable with the orthodox instructional method of teaching and find no relevance for the use of ICT facilities, which could also be that they find it difficult to adapt to the use of e-learning facilities

Although the literature suggests that a substantial number of works have been done on e-learning adoption in Nigeria, most studies have focused on difficulties, problems, prospect and issues relating to the availability of e-learning facilities mostly in public Higher Education Institutions (Anene et al., 2014; Eze et al., 2018). while the evaluation of the lecturers' level of acceptance and usage in Higher Education Institutions in Nigeria seems to be essentially understudied. Nwokolo et al. (2017) reviewed the impact of e-learning on education and training in Nigeria's public tertiary educational institutions and discussed the impact of e-learning technologies, factors affecting its full adoption such as power shortage, lack of technical manpower and high cost of computer hardware acquisition. The study mentioned the prospects of its full implementation to the institutions and recommended the way forward but there is need to find out whether there has been any change with respect to acceptance and utilization.

With the out- break of COVID-19 and other factors that have disrupted the academic calendar in Higher Education Institutions of learning, e-learning has become an alternative used in teaching to meet up with the academic demand of various institutions. Despite the introduction of e-learning in schools, it appeared that all academic activities and school's programs are still carried out through the conventional method in most schools. Even though there is a constant advancement of technologies, academic staff, who are accustomed to not using new ICT tools, tend to avoid using the e-learning facilities. However, it is not clear if some of the academic staff, who opted to use the e-learning facility but are not proficient; seek adequate training to be more effective in their ICT usage. Could it be that the e-learning facilities are not provided or that the lecturers are not ready to accept and use the system? This has also raised questions as to whether there are some constraints to the effective adoption of e-learning. It is against this backdrop that the researcher seeks to evaluate the lectures' level of acceptance and usage of e-learning in teaching, during economic uncertainty.

The main purpose of this study is to evaluate the extent to which e-learning facilities are available, accepted and used in Federal Higher Education Institutions in Anambra State. The study specifically determines:

18. facilities available for e-learning in the institutions
19. the extent to which lecturers accept the use of e-learning
20. the extent to which lecturers use the e-learning
21. the challenges encountered in the use of e-learning?

The following research questions were raised to guide the study:

9. What are the facilities available for e-learning in your institution?
- 2: To what extent have the lecturers accepted the use of e-learning?
- 3: To what extent have the lecturers used the e-learning facilities?
4. What are the challenges encountered in the use of e-learning?

Method

The study employed a descriptive survey design because no variable used in the study was manipulated. The population of the study comprised 730 lecturers in the Faculty of Education/schools in the two Federal Higher Institutions (Federal College of Education Umunze - 420 and Nnamdi Azikiwe University, Awka - 310) in Anambra State (Source: Secretary to the Dean). The sample comprised 200 lecturers obtained through simple random sampling technique. One hundred lecturers each, from Nnamdi Azikiwe University, Awka and Federal College of Education, Umunze obtained through simple random sampling technique were used. Out of Ten Departments in Nnamdi Azikiwe University and seven Schools in Federal College of Education Umunze, five Departments/Schools were sampled using simple random technique. A total of ten Departments/Schools were selected. Twenty lecturers were randomly selected from each of the five Departments/Schools, which gave rise to the sample.

The instrument for data collection was a modified Likert type questionnaire titled Lecturers' Acceptance of E-learning Questionnaire (LAEQ)

The instrument has two sections. Section A sought information on the personal data of the respondents. Section B is divided into four clusters, structured after the research questions. Each cluster has ten (10) items. The first cluster titled "Availability and Adequacy of E-learning Facilities (AAEF)" has a response mode of "Available", "Not Available", "Adequate", "Not Adequate". The second cluster titled "Level of Acceptance of E-learning Facilities (LAEF)" has a response mode of "Very High Extent – Very Low Extent. The third cluster titled "Level of Usage of E-learning Facilities (LUEF)" also has a response mode of Very High Extent – Very Low Extent while the fourth cluster titled "Challenges Encountered in the use of E-learning Facilities (CEEF). The instrument for data collection was validated by two experts in the Department of Educational Foundations. The reliability of the instrument was determined using Cronbach Alpha technique, which yielded a reliability estimate of 0.85, which was considered high enough to confirm the instrument as reliable. The instrument was administered to the two Federal Higher Education Institutions through online google form. Arithmetic mean and

Standard deviation were used to analyze the data. The mean of 2.50 was used as the cut-off point for decisions because of the four-point scale used in the study. The decision rule therefore was that any weighted mean scores from 2.50 and above were taken as agree/high extent/available and adequate, while weighted mean scores below 2.50 were taken as disagree/low extent/not available and inadequate.

RESULTS

Research Question 1: What are the facilities available for e-learning in your institution?

Table 1: Mean ratings of the facilities available for e-learning in Higher Education Institutions

	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic
1. Personal computers	171	1	3	2.37	.811
2. E-library	171	1	3	2.68	.569
3. Quality and accessible internet facilities provided by the institution	171	1	3	2.11	.790
4. Department's /School's website for accessing course code, course outline and lecturer's details.	171	1	3	2.21	.769
5. Multimedia Projectors	171	1	3	1.84	.814
6. E-mail facilities provided by the school	171	1	3	2.32	.801
7. Alternative power supply	171	1	3	2.05	.761
8. Virtual classroom/laboratory	171	1	3	1.79	.696
9. E-learning hardwares and softwares	171	1	3	2.00	.651
10. Constant electricity supply	171	1	2	1.53	.501
Valid N (listwise)	171	2.09			
Overall Mean					

Table 1 shows that of all the items, only item 2 has mean scores above the cut-off mean. This indicates that e-learning facilities are not available and adequate with mean ratings ranging from 1.53- 2.37 but indicated that E-library is adequately provided with mean rating of 2.68, which is above the mean.

Research Question 2: To what extent have the lecturers accepted the use of e-learning?

Table 2: Mean ratings of the extent lecturers have accepted the use of e-learning

	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic
1. With my level of technological skills, I am not comfortable with the idea of e-learning.	171	1	4	1.84	.935
2. I use e-learning because I have experience and knowledge about teaching in the online environment	171	1	4	2.53	1.190
3. E-learning is not suitable for me because my teaching style cannot be adapted to it.	171	1	4	1.63	.932
4. I prefer the use of traditional method(face to face) of teaching to e-learning.	171	1	4	2.37	.988
5. The E-facilities are user friendly.	171	1	4	2.79	.896
6. I am comfortable with the use of e-learning to deliver lectures since it is not too technical to grasp	171	1	4	2.79	1.007
7. E-learning enhances my teaching effectiveness	171	1	4	2.74	1.071
8. Inadequate training of users affects successful adoption of e-learning	171	2	4	3.47	.597
9. E-learning makes lesson very interesting and easy to deliver	171	1	4	2.95	.890
10. Only young lecturers use e-learning approach while the old ones still use traditional approach (face to face)	171	2	4	2.89	.854
Valid N (listwise)	171				
Overall Mean		2.6			

Table 2 shows that of all the items, 7 items have mean scores above the cut-off mean. This indicates that the extent lecturers accept e-learning facilities is high with mean ratings ranging from 2.53 – 3.47 while 3 items are below the mean, indicating low extent.

Research Question 3: To what extent have the lecturers used the e-learning facilities?

Table 3: Mean ratings of the extent lecturers have used the e-learning facilities

	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic
1. I engage students with online class	171	1	4	2.58	1.045
2. I manage and monitor students' access to the platform	171	1	4	2.16	.990
3. I access my semester results on e-learning environment	171	1	4	2.32	1.130
4. I am always assisted before accessing e-learning platform	171	1	3	1.95	.761
5. I have not mastered how to upload materials in the platform	171	1	4	2.32	.923
6. I have acquire relevant skills and knowledge on the use of e-learning	171	1	4	2.63	.988
7. I use both "face to face" and e-learning approach	171	1	4	2.95	.761
8. I have difficulty in administering quiz and examination through the e-learning platform	171	1	4	2.37	1.040
9. I chat with teachers on e-learning environment	171	1	4	2.37	.988
10. I browse to source materials/information on e-learning environment	171	1	4	3.11	1.024
Valid N (listwise)	171	2.48			
Overall Mean					

Table 3 shows that of all the items, 4 items have mean scores above the cut-off mean. This indicates the extent lecturers use e-learning facilities with mean ratings ranging from 2.58 – 3.11 while 6 items are below the mean, indicating low degree of usage.

Research Question 4: What are the challenges encountered in the use of e-learning?

Table 4: Mean ratings of the challenges encountered in the use of e-learning

	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic
1. Poor interaction with the students due to network issues	171	2	4	3.47	.597
2. Not all the students have access to internet	171	3	4	3.53	.501
3. There is low and unstable electricity supply especially in rural areas	171	2	4	3.58	.593
4. E-learning facilities are not regularly updated	171	2	4	3.26	.786
5. Financial challenges in Nigeria do not give room to full exploitation of the advantages of e-learning.	171	3	4	3.68	.466
6. Difficulty in applying e-learning for practical courses	171	2	4	3.47	.597
7. Longer time to prepare for an online course	171	2	4	3.00	.651
8. Institution not ready to adopt the system due to poor education funding by the federal government	171	2	4	3.21	.616
9. School management does not address the challenges encountered by the lecturers	171	2	4	3.32	.655
10. Shortage of trained personnel who can perform operating system and network administration	171	2	4	3.26	.638
Valid N (listwise)	171				
Overall Mean		3.38			

Table 4 shows that all the items have mean scores above the cut-off mean. This indicates that all the items are challenges encountered in the use of e-learning with mean ratings ranging from 3.00 – 3.68.

Discussion

The findings of the study revealed that e-learning facilities are available in Higher Education Institutions, but the facilities are not adequate for effective teaching. This finding contradicts that of Atsumbe et al. (2012) who posited that there are poor facilities specifically directed towards teaching and learning rather most facilities were channelled towards administrative use. The findings of the study also revealed that lecturers are not well equipped with the necessary skills needed to accept the use of e-learning. The findings of the study agree with Rosnaini and Mohd-Arif (2010) who observed that a minority of teachers were knowledgeable in basic ICT. However, some of them only averaged a minimal knowledge in ICTs.

In addition, lecturers can surf the web but many of them agreed that they have not fully utilized the e-learning platform to facilitate teaching and learning as they still depend on ICT personnel for assistance. This is in line with the findings of Okocha and Odinko (2023) which revealed that lecturers should not only be able to use ICTs but become comfortable in using them if they are to participate fully in the contemporary tertiary institution life and perform their everyday tasks and be satisfied on their job. The study revealed that several factors such as insufficient funds, inadequate supply of facilities among others influence the acceptance and use of e-learning in Higher Education Institutions. This is supported by Asogwa (2018), who found out that some of these constraints may relate to insufficient funds, inadequate supply of electricity and e-learning materials among others In Nigeria, education.

Conclusion

Based on the findings, it was concluded that inadequate supply of e-learning facilities and training of staff hinder the lecturers in accepting and utilization of e-learning platform in Higher Education Institutions.

Recommendations

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

1. Higher Education Institutions should provide adequate e-learning facilities.
2. University management should encourage the lecturers to keep updating their skills through workshop and training in the use of e-learning facilities.
3. Experts should conduct periodical training for lecturers on the use of e-learning facilities to enhance teaching. This will enable them adapt to using the e-learning facilities in order to improve teaching and learning process.

4. The challenges hindering the acceptance and full utilization of e-learning system should be addressed in order to brace up with present day educational challenges.

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