



ISSN: 2350-0328

**International Journal of Advanced Research in Science,
Engineering and Technology**

Vol. 6, Issue 10, October 2019

E-Learning Utilization among Nigerian Polytechnics Students

Habibu Aminu Sani, Nazmona Mat Ali, Norasnita Ahmad

Lecturer I, Department of Office Technology and Management, NuhuBamalli Polytechnic Zaria Nigeria;
Snr. Lecturer, Department of Information System, Universiti Teknologi Malaysia;
Snr. Lecturer, Department of Information System, Universiti Teknologi Malaysia

ABSTRACT: The advent of e-learning in education has changed the phases of global education worldwide. It is a modern creation in education, which emphasises learner's oriented and lifelong teaching learning procedures. Despite the enormous importance of e-learning to educational development, it is worrisome that most institutions of higher learning especially in the developing countries have failed to embrace its effective utilization among their students. There are series of studies on E-learning utilization in Nigerian Higher institution with little or none on e-learning utilization among Nigerian Public Polytechnics students in the North Western part of Nigeria. Therefore, this study identified factors affecting effective utilization of e-learning among students of Nigerian Polytechnics in the North Western part of Nigeria. Questionnaires was used to elicit information from the respondents. Findings reveals that e-learning is not being utilize by the students and also identified anxiety, culture, motivation, technology and attitude as factors influencing e-learning utilization among Nigerian Polytechnic students. It was recommended that Lecturers should encourage and guide student on the use of computer for learning purpose.

KEY WORDS: E-Learning, Utilization, Motivation, Information Technology, Higher Institutions of learning

I. INTRODUCTION

Recent explosion in Information Technology together with the strength of internet have continual effect on the provision of techniques for present worldwide digital environment. Global education industry have equally change considerably through E-learning by utilizing different tools to enhance the efficiency of contents[1]. Electronic learning is a modern creation in education, which emphasises learner's oriented and lifelong teaching learning procedures[2]. E-learning tools introduced have made learning, teaching and training feasible on the internet [3].

The purpose of E-learning in institutions of learning is to develop the effectiveness of instruction and students education. Most benefits is derived by applying E-learning in institutions of learning. Slides usage and videos, brings in visual and audio learning atmospheres. This leads to effective learning participation. Organizations interested in the introduction of E-learning have diverse cultures and enabling environments [4].

Advanced countries have adopted the application of electronic learning in their institutions of learning for quite a long time. In USA and United Kingdom for instance, PDAs, Wifi, SMS, webcams and other wireless technologies are used by lecturers with the aim of making classroom teaching simple. In addition, Australian, French and Korean government have been serious in the improvement of ICT and it is increasingly being introduced into all the economic and educational sectors [5].

A. E-Learning implementation in Nigeria

With the concerted efforts of Nigerian Government towards electronic learning by providing funds for ICT facilities, e-mail access, and information system management three decades ago, most institutions of higher learning in Nigeria have difficulties in implementing the idea in their various schools. It can rightly be said that Nigerian institutions of higher learning are lacking behind in the implementation and usage of electronic learning. Many factors can be attributed to this situations. Being a developing country notwithstanding, there are lack of proper policy and funding of education. In addition, technology and engineering development is very low[6]. According to Opkomu, Bethel Ebika



ISSN: 2350-0328

International Journal of Advanced Research in Science, Engineering and Technology

Vol. 6, Issue 10, October 2019

& Mercy, (2018) , who opined that Nigerian Universities do not have adequate knowledge and infrastructures for electronic learning implementation and usage, which leads to low rate of usage.

There are different studies carried out on E-learning utilizations by different scholars, consequence of which will give an insight on how to redirect this study. Firstly, we look at studies carried out on E-Learning adoption and utilization specifically focusing on students and lecturers views: Nicholas-omeregbe, (2017) investigated influencing factors for eLMS adoption and utilization in institutions of higher learning. Getting the views of students from some private universities in Nigeria. Their findings shows that cultururation, social influence are some of the factors that influences the intention to utilize eLMS. In addition, electricity power supply does not have any positive effect on intention to adopt the new innovation.

In an empirical studies on E- learning acceptance by Salloum, (2019); Al-Gahtani, S. (2014) among undergraduate students in Saudi Arabia using TAM3 model. It shows that TAM3 is still well accepted in Saudi Arabia culture. His studies reveals the importance of management interventions in E-learning management and effective utilization.

Rhema & Miliszewska, (2014) studied the attitude of undergraduates' students of engineering in Libya towards e-learning. Their findings shows that both male and female students have same positive attitude towards e-learning. And that both rural and urban students have positive interest in e-learning and its benefits. At the polytechnic system, Ademuyiwa, (2017) investigated the opinions of Ado Ekiti Federal Polytechnic lecturers and students on the importance of E-learning and computer base training in Polytechnic education. Their findings revealed that both students and staff of the polytechnic moderately agreed that E-learning and computer based testing should be encouraged. Knowledge of Computer does not have any impact on their opinion on E-learning relevance. In a study conducted by Eze, Chinedu-eze, & Bello, (2018) which examines the adoption and utilization of E-Learning among lecturers of selected private tertiary institutions in Nigeria. Their finding indicates that there are adequate E-learning facilities in the institutions and both lecturers and students have access to its usage. However, there are no efficient utilization of eLearning facilities in the institution.

B. Justification for E-Learning

The significant of E-learning cannot be over emphasized. As it has resulted in a remarkable transformation in higher institutions of learning, through the use of audio or videotape, interactive mobile and wireless learning applications, internet, intranet/extranet, , satellite broadcast, TV and CD-ROM, for interactions and content delivery among participants [3]. In addition, E-learning has encouraged transfer of knowledge efficiently anytime and anywhere, the subject matter notwithstanding. Thereby, enabling learning to take place globally. Equally, providing learners with knowledge and skill on information technology is crucial for success in present world-wide information economy[5]. Despite the advantages of E-learning, higher institution in Nigeria are not efficiently utilizing its facilities in their various institutions [12]. In a study carried out by Opkomu, Bethel Ebika& Mercy, (2018) shows that Rivers State University lack electronic learning facilities for learning purposes and lecturers do not have knowledge of electronic learning facilities in teaching courses. In a related study, Benjamin, Okwudili, & O, (2018); opine that teachers are still found wanting in using e-Learning resources, as they still employ old methods of teaching. In addition, Adisa, Adisa, Usman, & Barau, (2018); found out that the level of awareness on ICT usage and similar electronic learning activities among Nigerian researchers and lecturers were generally low. There are weak ICT policy implementation, insufficient practical backing for academic staff on how to use computer, and increasing cost of equipment use for ICT. And also, the traditional method of teaching is still being use [8].

Findings from studies conducted by Opkomu, Bethel Ebika& Mercy, and (2018) shows an inadequate and low utilization of electronic learning facilities for teaching purposes. They recommended that schools should organized training programme on how to use electronic learning facilities and equipment for staff. And that, schools should equip and maintain existing e-learning facilities. In the same vain, Nicholas-Omoregbe, (2017) investigated factors that could influence eLMS adoption in 3 private universities in Nigeria. Their findings indicates that power and performance expectancy significantly influenced behavioural intention to use eLMS. In addition, most recognized elements in the theory proposed have significance effects on user acceptance of eLMS. They suggested an extension in the scope of study area to public universities in Nigeria.

At the polytechnic level, Ademuyiwa, (2017) surveys the opinions of learners and instructors in Ado Ekiti Federal Polytechnic on the importance of CBT and electronic learning in Polytechnic systems of education. His studies revealed that both staff and students accepts that E-learning and Computer Based Testing is relevant in polytechnic education system. They suggested that Electronic learning and computer based testing be introduced and use in Polytechnic System and the medium be developed to enhanced practical and technological manpower development.



ISSN: 2350-0328

International Journal of Advanced Research in Science, Engineering and Technology

Vol. 6, Issue 10, October 2019

In the same vein, Eze et al., (2018) examines lecturer's adoption and utilization of e-learning facilities in privately owned tertiary institutions in Nigeria. Their findings shows that there is accessibility and adequate electronic learning facilities for the users in the university. And teachers are happy with the several e-learning equipment in the school in contrast to public higher institutions. It was recommended that facilities should be continuously improved. In addition, staff need to be train to maximize electronic learning facilities usage and advancement. Similarly, findings from the confirmatory assessment study conducted by this researcher among students of polytechnic in Nigeria, shows an evidence of poor e-learning usage among the students. It identified anxiety, culture, attitudes, technology and motivation as factors influencing e-learning utilization among Nigerian students. Result of this study form the basis for this paper.

Based on extensive literature review, bulk of Electronic learning studies on adoption and utilization in Nigeria higher institutions seems to focus on students and lecturers in the University setting [8][7][13]. Equally, it seems that little or no research had been conducted on utilization of E-learning among Nigerian public Polytechnic students [14]. Consequently, the current study is concerned with the investigation of factors responsible for non-utilization of E-learning among Nigeria Polytechnics students in the North West of Nigeria.

C. Research Questions

Based on the problem statement, this study intends to find answers to the following research question:

(A) what are the factors that influences non-utilization of E-learning among polytechnics students in North west of Nigeria?

The objectives therefore is to investigate those factors influencing non-utilization of e-learning among Nigerian polytechnics students.

D. Significance of the Study

Having a greater understanding of reasons influencing the acceptance and lack of utilization of E-leaning facilities among students is important because administrators can either take preventive measures and be encouraged on maintaining methods that will build a positive utilization of e-learning among students of institutions. If management, lecturers and students did not support e-learning system, the effects is that maximum usage and benefits will not be achieve [15]. For government to invest huge amount of money in the implementation of e-learning environment and programs, only to find out that users have a poor attitude towards usage of the system is discouraging. Consequently, this study endeavoured to find out signs and reasons that may hinder or encourage the acceptance and utilization of E-learning platform among Nigerian polytechnics students.

Current E-learning systems are having an unbelievable consequence on the progress of education settings by reducing the cost and duration of training learners, by incorporating location to enable students interact with fellow students and their instructors. The greater an e-learning system is, the greater students will be encourage to use it. And this will positively lead to the achievements of whole operations by creating learning among students. Eventually, this will support Nigerian Polytechnic students, lecturers and management to achieve the purpose of learning.

E. Scope of the Study

This study is focus on Polytechnics in the North Western part of Nigeria. The relevant information required for the study was gathered from the students of NuhuBamalli Polytechnic Zaria, Kaduna Polytechnic and Federal Polytechnic KauraNamoda in the North Western part of Nigeria. These students were chosen as a result of the limited resources and time frame available for the researcher. This is noting that, Nigeria is a very big country with very large land mass and population.

II. RESEARCH METHODOLOGY

A research design brings about many information and decisions that should be concern about when designing and carrying out a research, on how early decisions affects data collection, analyzed and interpreted later in the research procedures [16]. It is a stratagem and composition of exploration conceived to get an answer to a research questions. Therefore, this researcher used the quantitative investigation to accomplish the set purposes. Table 1 shows the research methodology framework employ for this study. It illustrates the research methodology, activities and deliverables for each step in the study.

Table 1: Details of phases in research methodology framework

Phases	Activities	Deliverables
Initial Planning	. Initiate the research . Analyse existing Problems	Research problems and objectives
Review of literature	. Review books, journals and thesis . Studying similar works using scientific data bases	Factors that leads to e-learning non-utilization.
Validation of instrument and confirmation of identified problem of study	. Select basic research method . Prepare questionnaire . Select participants . Conduct a confirmatory study using quantitative approach to analyse collected data. .Validation of instruments and constructs. .Confirmation of the identified problem of the study	Validate the research instruments and confirm identified problem of the study.

F. Findings and Analysis

Table 2: The findings and analysis for the study

S/NO	ITEMS	PERCENTAGE RESPONSE %				
		1 SD	2 D	3 N	4 A	5 SA
1	I feel tense when confronted with using computer during e-learning classes.	0	0	0	3.6	96.4
2	I always use e-learning in my studies	64.3	17.9	0	10.7	7.1
3	I will be interested in studying courses that uses e-learning	14.3	14.3	0	46.4	25
4	E-learning provides the flexibility of time and space including social interaction among students and instructors	7.1	14.3	3.6	75	0
5	All my friends uses e-learning in their studies.	60.7	21.4	0	17.9	0
6	Software is sufficiently provide for e-learning courses in the school.	85.7	7.1	0	7.1	0
7	In my culture using e-learning is accepted	71.4	28.6	0	0	0
8	I find e-learning interesting as a course	14.3	28.6	0	57.1	0
9	Students can easily get access to a computer within the school for e-learning classes	67.9	25	0	7.1	0

III. RESULTS AND DISCUSSION

Findings of the study shows that e-learning is not being utilize by the students in their studies. 64.3% of the respondents affirm to this. It was further reconfirmed that their friends do not use e-learning for their studies with 60.7% of the respondent testifying to this statement.

Identifying problems influencing e-learning utilization among the students. Anxiety, culture, motivation, technology and attitude were identified. This was justified with the following responses.



ISSN: 2350-0328

International Journal of Advanced Research in Science, Engineering and Technology

Vol. 6, Issue 10, October 2019

On anxiety, students feel tensed up when asked to use computer for learning purposes. 96.4% of the students strongly agreed with this statement. This justified anxiety as a reason for non-usage of e-learning by Nigerian students. It can be as a result of fear or lack of confidence on the use of computer.

Attitudes towards e-learning usage shows that 46.4% of the respondents accepted having interest in studying courses that uses e-learning. This shows a positive attitudes and motivation towards e-learning courses. In addition, 75% of the students agreed that e-learning has a greater advantage over the traditional methods of teaching.

In the same vain, technology availability findings shows that lack of software and computers are reasons for non-utilization of e-learning facilities by the students. This is evidence with their responses showing 85.7% rejection of the statement on software availability in the school, with also 67.9% disagreement on access to computers for e-learning classes.

On Cultural problem, 71.4% disagreed with the statement on whether their culture accept using e-learning. Which shows that culture is an influencing factors for e-learning usage among the students, despite the fact that they find it very interesting as shown by 51.1% of the respondents who are in agreement that e-learning is an interesting course?

Based on the foregoing, it is justified that there is poor e-learning usage among the students. The study further reveals factors such as anxiety, attitudes, motivation culture and technology as the influencing factor for e-learning utilization among Nigerian Polytechnic students. Therefore, there is need for a study to identify factors influencing e-learning utilization among Nigerian Polytechnic students.

IV. CONCLUSION

It is hoped that this study will proffer solution to the non-utilization of e-learning among Nigerian Polytechnic students. Equally, this research will add to existing literatures through identifying factors influencing non-utilization of e-learning and towards enhancing the development of e-learning model usage. The management will have an insights on need for its implementations and procedures appropriate to be adopted.

Similarly, it will assist the government in the policy formulation, curriculum planning and implementation towards e-learning utilization in Nigeria.

V. RECOMMENDATIONS

From the findings, it is recommended that:

- Lecturers should encourage and guide student on the use of computer for learning purpose.
- There is need for lecturers to give practical demonstration on importance of using computer for learning purpose.
- Religious and traditional leaders should be used to create awareness on need for general acceptance and use of e-learning among students of higher institutions of learning in Nigeria.
- Government and school authority should make available computers and its accessorie in institutions of higher learning in Nigeria..

REFERENCES

- [1] M. Abdullah, M.S. & Toycan, "Analysis of the Factors for the Successful E-Learning Services Adoption from Education Providers ' and Students ' Perspectives : A case study of Private Universities in Northern Iraq," vol. 14, no. 3, pp. 1097–1109, 2018.
- [2] H. E. Dvhg *et al.*, "he %dvhg (/hduqlqj 6\vw hpv \$ffhswdqfh dqg 6xfhhvv \$ 5hyhzh ri &rqwulexwqlj)dfwruv iurp wkh , qvwuxfwruv¶ 3hufhswlrq," vol. 5, no. 2, 2018.
- [3] J. N. Anene, H. Imam, and T. Odumuh, "Problem and Prospect E-learning in Nigerian Universities Problem and Prospect E-learning in Nigerian Universities," no. December 2014, 2018.
- [4] F. A. Moafa, K. Ahmad, W. M. Al-rahmi, N. Yahaya, Y. B. I. N. Kamin, and M. M. Alamri, "Develop a Model to Measure the Ethical Effects of Students Through Social Media Use," *IEEE Access*, vol. 6, pp. 56685–56699, 2018.
- [5] J. A. Ademuyiwa, "E - Learning and C . B . T in Polytechnic Education System in Nigeria," vol. 168, no. 3, pp. 31–37, 2017.
- [6] B. N. Nwabufo, T. A. Umoru, and J. O. Olukotun, "The Challenges of E-Learning in Tertiary Institutions in Nigeria," pp. 1–4, 2010.
- [7] T. Opkumu, Bethel Ebika & Mercy, "Factors Limiting The Use Of E-Learning For Staff Development In Environmental Science In," vol. 4, no. 8, pp. 65–72, 2018.
- [8] O. S. Nicholas-omeregbe, "E-Learning Management System : A Case Of Selected Private Universities In Nigeria," no. April, pp. 106–121, 2017.



ISSN: 2350-0328

**International Journal of Advanced Research in Science,
Engineering and Technology**

Vol. 6, Issue 10 , October 2019

- [9] S. A. Salloum, *Factors Affecting Students ' Acceptance of E-Learning System in Higher Education Using UTAUT and Structural Equation Modeling Approaches*, vol. 2. Springer International Publishing, 2019.
- [10] A. Rhema and I. Miliszewska, "Analysis of Student Attitudes towards E-learning : The Case of Engineering Students in Libya," vol. 11, pp. 169–190, 2014.
- [11] S. C. Eze, V. C. Chinedu-eze, and A. O. Bello, "The utilisation of e-learning facilities in the educational delivery system of Nigeria : a study of M-University," 2018.
- [12] A. O. Agbatogun, "Faculty Members' Views of E – Learning in South-West Nigerian Universities," vol. 6, no. 3, 2010.
- [13] C. D. Benjamin, O. P. Okwudili, and O. H. O, "Teachers ' opinion on availability of e-learning opportunities for effective technical and vocational education and training (TVET) programme in tertiary institutions in South east Nigeria," vol. 10, no. January, pp. 1–6, 2018.
- [14] R. S. Adisa, M. Y. Adisa, T. Usman, and A. A. Barau, "Education System Mulikat Y Adisa," *2018 21st Saudi Comput. Soc. Natl. Comput. Conf.*, pp. 1–6, 2018.
- [15] A. Tarhini, T. Elyas, M. A. Akour, and Z. Al-salti, "Technology , Demographic Characteristics and E-Learning Acceptance : A Conceptual Model Based on Extended Technology Acceptance Model," vol. 6, no. 3, pp. 72–89, 2016.
- [16] D. F. Birks, "marketing research: an applied approach," 2007.