

Awareness and Challenges of E-Learning in Teaching and Learning Business Education Courses in Universities in Kwara State

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Abstract: *This study explored awareness and challenges of e-learning in teaching and learning business education courses in universities in Kwara State, Nigeria. A descriptive study design was selected. This study was guided by two objectives, two research questions, and two null hypotheses. The survey sample included 686 lecturers and students in business education in universities in Kwara State. There was no sample due to the sizeable study population. A questionnaire checked by three experts served as a means of data collection. Instrument reliability was assessed using the Cronbach alpha method, yielding an r-factor of 0.78. Data for the research question were reported with mean and standard deviation. An independent-samples t-test was used to test the null hypotheses 1 and 2 at the 0.05 significance level. The study found that lecturers and students alike had awareness in e-learning technology for teaching and learning business education courses at a moderate level in universities, lack of associated software, and irregular power supply, has been found to be some of the notable challenges faced by students when using face e-learning technologies to study business education in universities. Based on this result, this study leads to the conclusion that lecturers and students are aware of e-learning technologies but do not use them very often and the few that do, do not extensively use them. In order for business education to maximize its goals in an era of rapid technological change, business educators should apply e-learning technologies to teaching and learning of business education and the need for proper provision of ICT laboratories and equipment to curbs the e-learning challenges faced by students who use e-learning to study business education courses in universities.*

Keywords: Awareness, Challenges, E-Learning, Teaching, Learning, Business Education.

I. Introduction

Education is recognized around the world as the foundation and the only true tool for a nation's progress and survival. Good policy development and implementation rely upon quality education. It disclose people's economic potential. It empowers and equips individuals in society to participate in and benefit from the national economy, fosters economic development and provides a foundation for transformation. The 21st century has witnessed advances in learning technology, especially e-learning. Many authors have conceptualized e-learning in several ways as there have been many discussions about the overall definition of e-learning. Existing definition didactic design principles by Hedge and Hayward (2004). E-learning, therefore, aims to bring electronically delivered well-designed, learner-centered, interactive learning environments to anyone at any time by using the web and digital technology in conjunction with the principles of instructional design. An innovative approach to providing in developed countries, quick access to computers, Internet services, and other electronic devices makes learning easier. Okereke (2010) reports on the utilization of assorted electronic devices and equipment to support education in developed countries. He speculates that e-mail, real-time text conferencing, and online tutorials have been used in the teaching and learning process for several years. As listed by Ipaye (2011), e-learning platforms employed in developed countries include websites, wikis, blogs, Second Life, email, Twitter, course management systems, video/audio podcasts, Facebook, threaded discussion lists, video/audio text chat, video conferencing software and more. However, e-learning appears to be underutilized in Nigerian higher educational institutions. Business education students in many institutions don't seem to own email addresses yet and are unable to use a computer and have little knowledge of e-learning platforms. As reported by Olusegun et al. al. (2006), e-learning use is impacted by students' computer literacy, and many business education students lack the necessary computer literacy that underlies e-learning integration.

Awareness means having knowledge of the existence and usefulness of something. Business Education students can use e-learning only if they are aware of the various e-learning activities. Lecturers and students should be aware of the available e-learning tools that can be used in the teaching/learning process. Ipaye (2011), listed a number of these tools to include; website, wiki, blog, second Life, email, Twitter, course management system, video/audio podcast, Facebook, threaded discussion lists, video/audio text chat, and video conferencing software. Business education students in higher education seem to be unacquainted with e-learning applications, so ICT devices seem to be underutilized in education. The lack of availability of e-learning infrastructure such as digital libraries and computer studios in higher education institutions in Kwara appears to affect students' awareness and use of e-learning tools.

Business education is a component of a vocational/technical education program that prepares a person for a career in business and also enables them to become intelligent consumers of products and services. Business education provides students with the competencies, skills, knowledge, and attitudes they need to be workers in industry, public service, and business owners. Business education is work-oriented, competence-based, outcome-oriented, and technology-based Ademiluyi and Ayelotan (2022).

Major challenges in the proper implementation of e-learning in higher education in Nigeria include; technical and financial support, training, improved working conditions, technical background, skills, copyright protection, and professional development are always important in the efficient implementation of e-learning in Nigeria educational system.. A major obstacle to e-learning is the poor quality of internet services in Nigerian universities. E-learning is beneficial in increasing students` computer skills, although it requires significant financial resources. The internet Access (Data subscription): The rate at which the data subscribed are deducted is quite alarming and this serve as significant drawback as lecturers and students need to be subscribing from time to time so that they can be available for the online classes and likewise the unpredictable network problem serve as another issue as some areas within the country have network issues at different times of the day. One other challenges facing E-learning for effective teaching and learning in universities was the affordability of learning equipment (Smart Phone) as not all students have and can afford smartphones because some parents are still struggling to fund their children`s education and may not provide smartphones to them at some point in their studies. The usage of e-learning by business education students in tertiary institutions will lay the foundation for computer and software utilization within the business environment. It seems to the researchers that the extent to which Business Education students in tertiary institutions utilize e-learning has not been established, hence this study. This study focuses on identifying awareness and challenges of e-learning in the teaching and learning of business education courses in universities in Kwara State.

II. Statement of the Problem

E-Learning is not a new phenomenon in promoting education in some parts of the world. Some institutions in Nigeria are now using it to facilitate distance learning (DE) and lifelong learning. Rapid advances in technology necessitated an update in training. The need to learn anytime anywhere was a barrier to achievement. Wolfinger (2016). Over the past two decades, online learning has been revitalized at several global institutions. However, most schools, colleges and universities in Nigeria do not use this mode of education and their staff does not know anything related to e-learning. E-learning is the use of electronic and ICT devices in the course of education. According to Adeoye, Adanikin, and Adanikin (2020), e-learning refers to electronic learning methods combined with computer-assisted learning in interactive interfaces for the convenience of both learners and teachers. It is an innovative teaching tool with no physical contact between learners and teachers.

In Nigeria, overwhelmingly most schools, like the developed world, lack the necessary facilities to attend e-learning classes. Its use as a teaching and learning method should be emphasized in line with what is being achieved in other parts of the world (Ada, 2014). Years of research show that education programs in Nigeria have yet to fully adopt e-learning systems, and business education is no exception. The authors further add that these universities have little or no infrastructure for cyber centers, computer-equipped classrooms, or high-speed internet, and may not have the resources to implement such infrastructure. Ajuzie and Akukwe (2015) stated that the teaching and learning process of business education in higher education in Nigeria is still at the level of the traditional teaching method, the "chalk and talk method". Manir (2011) also pointed out lack of computer culture among students, lack of access to e-learning technology for students to study business education courses, irregular power supply, and maintenance of ICT equipment for e-learning hinders the integration of new technologies into the educational process. These issues in e-learning are therefore the obvious ones that need to examine the awareness, challenges and prospects of e-learning technology in teaching and learning in university business education programs. With this in mind, this study was conducted to examine the awareness and identify challenges in using e-learning technologies for teaching and learning business education courses in universities in Kwara State.

III. Purpose of the Study

The main objective of this study was to examine the awareness levels and challenges of e-learning in teaching and learning business education courses in universities. Specifically, the objectives of this study are to:

1. examine the level of awareness of lecturers and students regarding e-learning technology in teaching and learning Business Education courses at Universities;
2. identify challenges faced by students in using e-learning technologies in teaching and learning Business Education courses at Universities.

IV. Research Questions

For research purposes, the following research questions were asked to guide the study.

1. What is the level of awareness of lecturers and student's on e-learning technology in teaching and learning of Business Education courses at the Universities?
2. What are the challenges faced by students in using e-learning technologies in teaching and learning of Business Education courses in Universities?

V. Research Hypotheses

The following null hypotheses are formulated for this research and were tested at the 0.05 level of significance.

- H01: There is no significant difference between the mean responses of the lecturers and students regarding the level of awareness on e-learning technologies in teaching and learning of Business education courses in universities.
- H02: There is no significance difference between the mean responses of male and female students on the challenges faced in using e-learning technologies in teaching and learning of Business education courses in universities

VI. Methods

A descriptive research study design was chosen for this study. The researchers felt this design was suitable for this study as it focuses on people, beliefs, opinions, attitudes and their behaviour. A total of 686 respondents were used, including 37 lecturers and 649 business education students from the universities they serve. Data were collected using a structured questionnaire. This tool has been validated by three business education experts. Their comments reinforced the surface and practical validity of the document.

To establish the internal consistency of the survey instrument, a pilot test was conducted in which data collected using the Statistical Package for the Social Sciences (SPSS) version 26 applications were analyzed using the Cronbach alpha reliability method. The analysis showed a reliability factor of 0.78, indicating that the instrument is reliable and suitable for research. The questionnaire consisted of a 4-point scale with response categories such as 'high level', 'moderate level', 'low level', and 'very low level'.

Administration of the instrument was performed personally by the researcher with the assistance of two research personnel. Of the 686 questionnaires issued, 646 were returned in full. A total of 646 questionnaires were used for data analysis, corresponding to a response rate of 94.9%. Data collected on the research questions were analyzed with descriptive statistics (frequency, mean, standard deviation) and independent-samples t-tests were used to test the hypotheses. When testing the null hypothesis that the observed significance value in the t-test is less than or equal to the 0.05 significance level, the null hypothesis was rejected. Otherwise, the null hypothesis was not rejected.

VII. Results

Research Question 1: What is the level of awareness of lecturers and students on e-learning technologies in teaching and learning of Business Education courses universities?

Table 1: Mean and standard deviation of responses on level of awareness of lecturers and students of e-learning technologies for teaching and learning of Business Education courses in universities

$N_L = 35$ and $N_s = 646$

| S/N | Item Statements | \bar{X} | SD | Remark |
|-----|---|-----------|------|----------------|
| 1. | Interactive whiteboard | 2.67 | 0.92 | Moderate Level |
| 2. | Audio/Video conferencing | 2.86 | 0.94 | Moderate Level |
| 3. | Chat room | 2.84 | 0.90 | Moderate Level |
| 4. | Live broadcasting /web conferencing | 2.86 | 1.08 | Moderate Level |
| 5. | Instant messaging | 2.55 | 1.05 | Moderate Level |
| 6. | VoIP (voice over internet protocol) Skype, video call, etc. | 2.55 | 0.98 | Moderate Level |
| 7. | Multimedia (computer, projector, mobile phone, etc.) | 2.94 | 0.70 | Moderate Level |
| 8. | Internet | 3.04 | 0.68 | Moderate Level |
| 9. | Email | 3.11 | 0.85 | Moderate Level |
| 10. | Discussion board/forum | 2.54 | 0.94 | Moderate Level |
| 11. | Blogs/weblogs | 2.62 | 0.74 | Moderate Level |
| 12. | Podcasting | 2.32 | 1.04 | Low Level |

| | | | | |
|-------------------------|----------------|-------------|-------------|-----------------------|
| 13. | e-portfolio | 2.46 | 1.04 | Low Level |
| 14. | Text messaging | 2.50 | 0.99 | Moderate Level |
| 15. | Wikis | 2.43 | 0.92 | Low Level |
| Weighted average | | 2.69 | 0.92 | Moderate Level |

Source: Field Survey, 2022

Analysis of information in Table 1 shows the mean and standard deviation of respondents regarding the level of awareness of lecturers and students on e-learning technologies for teaching and learning Business Education courses in universities. The table reveals that the respondents indicated that they were aware of interactive whiteboard, audio/video conferencing, chat room, live broadcasting /web conferencing, instant messaging, and VoIP (voice over internet protocol) Skype, video call, among others to a moderate level for teaching and learning Business Education courses in universities. These were supported by mean lots of 2.67, 2.86, 2.84, 2.86, 2.55 and 2.55 respectively. Similarly, the respondents indicated that they were aware of multimedia (computer, projector, mobile, among others.), internet, email, discussion board/forum, blogs/weblogs, and text messaging to moderate level for teaching and learning Business Education course in universities. These were supported by mean lots of 2.94, 3.04, 3.11, 2.54, 2.62 and 2.50 respectively. Additionally, the respondents indicated that they were aware of podcasting, e-portfolio, and wikis to low level. These were supported by mean scores of 2.32, 2.46 and 2.43. The table reveals that the all the 15 items have variance ranging from 0.68 to 1.08. This implies that the responses aren't widespread as they're near to their respective mean scores. Table 1 shows a ground calculated weighted average mean and standard deviation of 2.69 and 0.92 respectively. This means that lecturers and students were aware of e-learning technologies for teaching and learning of Business Education courses to moderate level in universities (mean = 2.69, SD = 0.92).

Research Question 2: What are the challenges faced by students in using e-learning for teaching and learning Business Education courses in universities?

Table 2: Mean and standard deviation of responses on the challenges faced by students in using e-learning for learning Business Education courses in universities

$N_s = 646$

| S/N | Item Statements | \bar{X} | SD | Remark |
|-------------------------|--|-------------|-------------|---------------|
| 1. | Lack of access to e-learning technology for learning of business education courses by students | 2.89 | 1.01 | Agreed |
| 2. | Irregular power supply | 3.08 | 1.03 | Agreed |
| 3. | High cost of maintenance of ICT equipment for e-learning | 2.88 | 0.99 | Agreed |
| 4. | Low level of students' accessibility to internet facilities | 3.18 | 0.86 | Agreed |
| 5. | shortages of relevant software | 3.13 | 1.07 | Agreed |
| Weighted average | | 3.03 | 0.99 | Agreed |

Source: Field Survey, 2022

Analysis of data in Table 2 shows the mean and standard deviation of responses on the challenges faced by students in utilizing e-learning for teaching and learning Business Education courses in universities. The table reveals that the respondents agreed that some of the challenges faced by students are lack of access to e-learning technology for learning of business education courses by students, irregular power supply, and high cost of maintenance of ICT equipment for e-learning. These were supported by mean scores of 2.89, 3.08, and 2.88. Additionally, the respondents agreed that low level of students' accessibility to internet facilities, and shortages of relevant software are challenges faced by students in utilizing e-learning for learning Business Education course in universities. These were also supported by mean scores of 3.18 and 3.13. The table revealed that the all the five items have standard deviation ranging from 0.86 to 1.07. This suggests that the responses of the respondents aren't widely spread as they are close to their respective mean scores. This implies that the respondents agreed that all the item constructs are challenges faced by students in utilizing e-learning for teaching Business Education courses in universities (mean = 3.03, SD = 0.99).

VIII. Testing of Hypotheses

H01: There is no significant difference between the mean responses of the lecturers and students regarding the level of awareness of e-learning technologies for teaching and learning Business education courses.

Table 3: Summary of t-test of the difference between the mean responses of lecturers and students regarding the level of awareness of e-learning technologies for teaching and learning of Business education courses

| Group | N | Mean | SD | t-cal | Df | p-value | Decision |
|-----------|----|------|------|-------|-----|---------|---------------------------------|
| Lecturers | 35 | 2.62 | 0.30 | 1.603 | 679 | 0.109 | H ₀₁ Not Rejected |

| | | | |
|----------|-----|------|------|
| Students | 646 | 2.69 | 0.26 |
|----------|-----|------|------|

Source: Field survey, 2022

P>0.05

Analysis of information in Table 3 reveals that there are 35 lecturers and 646 students. The lecturers and students' responses showed that they were aware of e-learning technologies for teaching and learning Business education courses to moderate level ($\bar{X} = 2.62$; SD = 0.30) and ($\bar{X} = 2.69$; SD = 0.26). Their responses are near to the mean because the standard deviations are very low. The table revealed that there was no significant difference in the mean ratings of lecturers and students regarding the level of awareness on e-learning technologies in teaching and learning of Business education courses in universities ($t_{679} = 1.603$, P>0.05). Therefore, the null hypothesis that states that there's no significant difference in the mean responses of lecturers and students regarding the level of awareness on e-learning technologies for teaching and learning Business education courses in universities wasn't rejected. This implied that lecturers and students don't differ significantly in their responses regarding the level of awareness of e-learning technologies for teaching and learning Business education courses.

H02: There is no significance difference between the mean responses of male and female students on the challenges faced in using e-learning technologies for learning Business education courses in universities.

Table 4: Summary of t-test of the difference between the mean responses of male and female students on the challenges faced in utilizing e-learning technologies for learning Business education courses

| Group | N | Mean | SD | t-cal | Df | p-value | Decision |
|--------|-----|------|------|--------|-----|---------|---------------------------------|
| Male | 278 | 3.26 | 0.25 | 14.005 | 644 | 0.000 | H ₀₄ Not Rejected |
| Female | 368 | 2.86 | 0.43 | | | | |

Source: Field survey, 2022

P>0.05

Analysis of data in Table 4 reveals that there are 278 male students and 368 female students. The male and female students' responses indicated that the respondents agreed to all the challenges faced in utilizing e-learning technologies for learning Business education courses ($\bar{X} = 3.26$; SD = 0.25) and ($\bar{X} = 2.86$; SD = 0.43). Their responses are near to the mean because the standard deviations are very low. The table revealed that there was significant difference in the mean responses of male and female students on the challenges faced in utilizing e-learning technologies for learning Business education courses in universities ($t_{644} = 14.005$, P<0.05). Therefore, the null hypothesis that states that there's no significant difference in the mean responses of male and female students on the challenges faced in utilizing e-learning technologies for learning Business education courses in universities was rejected. This implied that male and female teachers differ significantly in their responses regarding the challenges faced in utilizing e-learning technologies for learning Business education courses. Their responses showed that male students rated the challenges faced in using e-learning technologies for learning higher than female students did (mean difference = 0.40).

IX. Discussion of Findings

The results indicated that lecturers and students were found to be familiar with e-learning technologies for teaching and learning business education courses to a moderate level at Kwara state universities. This suggests that there's a moderate level of awareness of e-learning technology for teaching and learning business education among lecturers and students. This is consistent with his Okiki (2011) who objected to the idea that e-learning is not widely known in Nigeria. Okiki pointed out that there is a growing awareness of using information and communication technology (ICT) in the teaching and learning process. Ndinechi and Bupo (2015) also found that e-learning awareness is growing rapidly in Nigeria. The survey found that 12 out of 15 e-learning technology applications are known to students. Students had some proficiency with e-learning technologies such as email, text messaging, the Internet, chat rooms, blogs, instant messaging, VoIP (Voice over Internet Protocol), Skype, and video calling. This may be because these applications are part of the educational process. However, student responses to electronic portfolios of videos, podcasting, and wikis were low. Result of hypothesis revealed that there was no significant difference in the mean ratings of lecturers and students regarding the level of awareness on e-learning technologies in teaching and learning of Business education courses in university. This means that there is no significant difference in opinion between lecturers and students regarding their level of awareness of e-learning technologies for teaching and learning business education courses. This is consistent with Ndinechi and Bupo (2015). Who mentioned that the educational institution they attend (university or teacher training college) does not affect students' level of awareness of e-learning technology for teaching or learning business education courses in universities.

The study also found that challenges faced by students when using e-learning to study business education courses included ease of access to internet facilities, lack of associated software, and unstable power supply. It became clear that students agree that the lack of student access to internet facilities and related software is a challenge student's face when using e-learning to teach and learn business education courses at the university. This is consistent with Ssekakubo, Suleiman, and Marsden (2011) who found that Technical support, high ICT literacy rates in the student community, internet accessibility, lack of relevant software, inefficiencies in maintenance strategies, and inappropriate users some other reasons for the unacceptability of e-learning. The findings of this study

also confirm the findings of Nwabufu, Umoru, and Olukotun (2012), who stated that unequal access to technology itself, Internet connectivity, software and license costs, are limitations and barriers identified as challenges affecting the use of e-learning in teaching and learning in tertiary institutions in Nigeria.

The hypothesis test results in Table 4 showed that there was a significant difference in the mean responses of male and female students on the challenges faced in using e-learning technology for teaching and learning business education courses in universities. This means that male and female students react very differently to the challenges faced in using e-learning technologies for teaching and learning business education courses. Their responses indicate that male students rated the challenges of using e-learning technologies for teaching and learning higher than female students. Watty et al. (2015) also found statistically significant differences in the responses of men and women on factors affecting the use of e-portfolios to enhance learning.

X. Conclusion

Based on the findings of the study, it was concluded that e-learning is evident and has a positive effect in teaching and learning of business education courses in universities, as the study reveals Lecturers and students were aware of e-learning technologies for teaching and learning of Business Education courses in universities to a moderate level. Therefore, it was concluded that lecturers and students are aware of e-learning technologies but scarcely utilized them and the few utilized were not extensively used. Incidentally, many challenges were found to constrain the utilization of e-learning technologies by students. Some of the challenges were: high cost of maintenance of ICT equipment for e-learning, shortage of relevant software's, lack of access to e-learning technologies for learning of business education students, high cost of data bundle, poor Internet services by network providers, unstable Internet services/network, unsteady/poor power supply to power the Internet enabled devices, high cost of Internet enabled devices among others. For business education to therefore maximally attain its goals in the phase of advancing rapid technological changes and development, effort should be made by the business educators to effectively use the ICT facilities in the teaching and learning of business education. This could be improved if the above challenges were reduced or eliminated to improve competitive graduate production.

XI. Recommendation

Based on the research findings, the following recommendations were made:

1. The Ministry of Education should make e-learning a compulsory subject in Nigerian schools (primary, secondary and tertiary institutions). This will ensure proper awareness and proper use of e-learning technologies.
2. The Government shall establish a modern e-library well equipped with all kinds of e-learning devices and tools necessary to enable teachers and students to use e-learning technologies effectively and efficiently in teaching and learning and also subsidize software licenses to allow software vendors to create affordable software for faculty and staff to use in their teaching and learning processes make it possible.

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.
- Ademiluyi, L.F. & Ayelotan, O. I. (2022). Adequacy of ICT for effectiveness of online teaching and learning – post Covid-19 in Ogun State public tertiary institutions. *KWASU International Journal of Education (KIJE) 4 (1)*.
- Ada, A. (2014). *Assessment of availability and utilization of e-learning technologies in business Education programme in tertiary institutions in Delta State*. Unpublished (unpublished M.Sc Project), Delta State university.
- Ajuzie, N., E., & Akukwe, A., C., (2015). An assessment of the use of ICT tools by students to the study of Business Education. *World Scientific News*, 9(1), 9-17.
- Hedge, N., & Hayward, L. (2004). Redefining roles. University e-learning contributing to life-long learning in networked world. *E – Learning*, 1, 128-145.
- Ipaye, B., (2011). *E-earning in a Nigerian open university*. Retrieved on June 16, 2011, from <http://linc.mit.edu/linc2010/proceedings/session1Ipaye.pdf>.
- Nwabufu, .B.N., Umoru, T.A., & Olukotun, J.O. (2012). The challenges of e-Learning in tertiary institutions in Nigeria. (2nd Edition) International Conference the Future of Education. https://conference.pixelonline.net/conferences/edu_future2012/common/download/Paper.
-

- Ndinechi, G. I., & Bupo, G. O. (2015). Awareness of e-learning among business education students in Anambra State tertiary institutions. *International Journal of Educational Research and Development*, 5 (1), 101 – 108.
- Manir, K. A. (2011). Implication of ICT's in libraries of higher education institutes: A panacea catapulting library development in Africa. *DESIDOC Journal of Library & Information Technology*, 31(1), 65-71.
- Okiki, C.O. (2011). *Information communication technology support for an e-learning environment at the University of Lagos, Nigeria*. Retrieved on June 20, 2011 from <http://www.faqs.org/periodicals/201102/2296746331.html>
- Okereke, E.C. (2005). Strategies for integrating information and communications technology in the business teacher education curriculum. *Journal of Vocational and Adult education*, 4(1), 95 – 105.
- Ssekakubo, G., Suleiman, H. & Marsden, G. (2011). Issues of adoption: Have e-learning management systems fulfilled their potentials in developing countries? Available at <http://www.saiICSIT.ac.za/afuniv.html>. accessed on 20 August, 2018
- Watty, K., McKay, J., Leanne Ngo, L., McGuigan, N., Leitch, S. & Kavanagh, M. (2015). Portfolios in business education, a national study of eportfolio implementation 2013 to 2015. 13p3 CA ANZ_ePortfolios in Business Education Paper_ FA. Indd. Retrieved from: charteredaccountantsanz.com
- Wolfinger, S. (2016). *An exploratory case study of middle school student academic achievement in a fully online virtual school* (Doctoral dissertation, Drexel University). Drexel University.