Availability and Utilization of E-Learning Technology Resources In Teaching Business Education Subjects

Mohammed Abdulrazak[1], Moses Adeleke Adeoye[2]

[1]Business Education Department, Faculty of Education, Al-hikmah University Ilorin-Nigeria
[2]Educational Management Department, Faculty of Education, Al-hikmah University Ilorin-Nigeria

Corresponding author, email: mabdulrazak@alhikmah.edu.ng

Abstract

The study explores the availability and utilisation of e-learning technology resources in teaching and learning of Business Education subjects in Colleges of Education in Niger State. The study adopted a descriptive survey research design. The study answered two research questions. The population for the study was 33 Business Education lecturers and 255 NCE III Business Education students from Niger State College of Education, Minna and Federal College of Education, Kontagora. No sampling was done as the population was of a manageable size, the researcher used all populations. The researcher instrument used for data collection was a structured questionnaire that contained 40 e-learning technology resources on a four-point Likert-rating scale. Mean and standard deviation were used to answer the two research questions raised for the study. The result findings revealed that e-learning technology resources are not readily available, and the few available ones are not adequately utilised for the teaching of Business Education subjects in Colleges of Education in Niger State. It was concluded that lecturers need to effectively utilize the few available e-learning technology resources for the teaching and learning of Business education subjects in Colleges of Education in Niger State. It was recommended among others that Lecturers should be more motivated by governments to use the available e-learning technology resources to foster effective delivery of teaching and learning.

Keywords: school infrastructure; student motivation; quality learning; automotive engineering

INTRODUCTION

Stakeholders in the Educational sector have continued to advocate that society needs to place a premium on skills possessed by individuals rather than certificates. Researchers reported that this drift in education results from the changes in industries' labour demand. This accounts for the inclusion of Business Education subjects in the curriculum of schools at all educational levels. Colleges of education offer business education courses that cover the study of technologies and related sciences as well as developing practical skills, attitudes, understanding, and knowledge related to various sectors of the economy and society (Enang & Okute, 2019). E-learning in today's generation has refined the core aspects of teaching and has made schools perform more efficiently (Alenezi, 2020). To disseminate

knowledge and information, e-learning applies a wide range of technologies related to information processing and electronic communications, including computers, the internet, e-mail, computer software, satellite, mobile communication devices, and other related electronic devices (Okeke & Ihenacho, 2019).

Through curriculum development design and innovation, e-learning improves education by putting the right human and material instructional resources in place for efficient teaching and learning. In general, it refers to all types of instructional technology used in teaching and learning. E-learning includes computer-based interaction (CBI), computer-based training (CBT), computer-enhanced learning (TEL), online education, virtual education, virtual learning environment (VLE), also referred to as learning platforms, computer-based training (CBT), computer-assisted instruction or computer-aided instruction (CAI), and digital educational collaboration (DEC). Researchers stated that the use of E-learning has greater benefits to students, teachers, and other stakeholders as it; provides access to information with the latest technologies, and engages students in the learning process and skills.

The term Business Education has been given a variety of meanings depending on the perspective from which it is seen. A form of education known as "business education" is one that both directly and indirectly gets a student ready for a business career. Business education is a kind of training that, while contributing to the overall goals of education at any given level, primarily strives to prepare students for entering the workforce, providing effective service, and moving up the employment ladder (Atiaja & Proenza, 2016). Every person has the opportunity to acquire the knowledge, skills, and abilities necessary to manage his business affairs competently through basic business education. It also helps them understand the various career options in the broad field of business and fulfil their civic obligations by engaging in informed participation in and appreciation of the business system (Atiaja & Proenza, 2016). In addition, basic business education covers a wide range of topics related to the economy. It defines and clarifies the function of business as an economic entity and offers experiences and information that ready the reader to engage in society as a citizen and customer.

The study aimed to investigate the accessibility and effectiveness of e-learning tools in Niger State's education colleges for Business Education classes. The sample consisted of two Niger State colleges, but the study could not provide an exhaustive list. The study aimed to understand how instructors and students felt about the accessibility and application of e-learning technology. Future research should include objective metrics of resource accessibility and utilization, cover a wider variety of Niger State colleges, and use qualitative and quantitative methodologies like focus groups, observations, or interviews. Longitudinal studies could provide insights into the effectiveness of initiatives to increase resource accessibility. Comparative studies between states or regions could provide insights into the use and availability of e-learning technology resources in different settings. Future studies should consider evaluating specific e-learning technology resources offered at Niger State's colleges, considering aspects such as technical functionality, applicability to business education, and accessibility.

One of the resources created through Information and Communication Technology includes e-learning which is fast becoming popular in the education sector across the globe. The application of ICT in Teaching enhances effective teaching and learning and plays complementary roles in teaching and learning situations. Technologies such as e-learning necessitate and facilitate learning. The use of e-learning technologies promotes learning at a distance and one's own pace enhances motivation, helps recall previous learning, and provides new instructional stimulus for the learners. The use of e-learning tools in the delivery of Business Education subjects in Colleges of Education in Nigeria is still being gradually adopted by educational programs, even though technological advancements have led scholars to refer to the world as a global village (Amiaya 2016; Kennedy, 2011; Salome, 2012).

Although the government has continued to make efforts to equip Colleges of Education classrooms in Nigeria with cyber rooms, computer-equipped classrooms, and internet services, the adequacy of its provision and the extent of its utilization is still at large. In addition, many lecturers and students do not

have the required skills and competence in the utilization of e-learning technology resources for effective teaching. There is also a rising dissatisfaction with the performance, competence, and skills of Business Education students in the use of e-learning technologies thus making it difficult for Business Education students to enter into the world of work and be globally competitive. Therefore, the purpose of this study is to investigate the availability and use of e-learning technology resources for Business Education disciplines in Niger State's colleges of education.

Inije et al. (2013) investigate how business education instruction is delivered at Nigeria's Delta State Colleges of Education using e-learning technology. Simple random selection was utilized to select 45 business education lecturers from the Colleges of Education for a descriptive survey study design. A structured questionnaire was used for data collection using a five-point rating scale. Data obtained were analyzed using mean and standard deviation to answer the research questions, while the null hypotheses were tested using t-test statistics. The results showed that several issues, such as a lack of e-learning infrastructure and facilities in the colleges of education and a shortage of qualified staff with e-learning applications, prevented the extensive use of e-learning technology resources in business education instruction. It was suggested, among other things, that lecturers undergo training and retraining to familiarize them with the advancement of new technology.

Issa (2018) investigated how E-Learning Technologies are Used and Recognized in Business Education Courses in Kwara State Universities. Four purposes were formulated to guide the study from which four research questions and four hypotheses were raised. A descriptive research design was used in this research. 300 lecturers and students made up the population for the study. There was no sampling as the population of the study was not much. Data were gathered using a standardized questionnaire called the "Awareness and Utilization of E-Learning Technologies in Teaching and Learning Questionnaire" (AUETTLQ). To address the research objectives, the study's data were statistically evaluated using mean, standard deviation, and frequencies and percentages for the respondents' personal information. Using an independent t-test, the null hypotheses were examined at the 0.05 level of significance. Among the study's other conclusions was that synchronous e-learning technologies are used in business school courses, and both instructors and students are aware of them. The study concluded that while both instructors and students are aware of synchronous and asynchronous e-learning tools, they most frequently use synchronous tools when teaching and learning business education courses. Among other things, it was suggested that instructors and students be made aware of the need to utilize the e-learning resources that are currently available to them through seminars and workshops.

Nwaosa and Okolocha (2014) investigate how business instructors in Nigeria's Edo and Delta states' post-secondary schools use e-learning technology. A descriptive survey research design was employed for the study. Five research questions were raised while three hypotheses were formulated and tested at 0.05 level of significance. A total of 173 practising business educators selected from the universities, polytechnic and colleges of education in Edo and Delta states were used for the study. The data collected for the study were analyzed using mean and standard deviation for the five research questions while the t-test and One-way Analysis of Variance (ANOVA) were also used for testing the null hypothesis. Major findings showed that there is no significant difference in the type of institution or ownership when it comes to the extent to which business educators in tertiary institutions in Edo and Delta use e-learning technology. The study's conclusions led to a recommendation that Nigeria's higher institutions receive sufficient funding from the federal and state governments to support the installation of computers, the internet, and other telecommunications equipment.

Sanusi (2022) examined the accessibility, suitability, and application of material resources for business education instruction in North-West Nigerian education institutes. The study was guided by Bertalanffy's (1968) system theory. The study was also guided by six specific purposes, six research questions and six null hypotheses. The study adopted a descriptive research design. The study included 303 participants, all of them were lecturers in business education from the nine educational institutes

located in North-West, Nigeria. The study equally revealed that there was no significant difference between the mean ratings of male and female business education lecturers on the extent of lecturers' utilization of equipment and supplies for teaching business education courses ($t123 = 0.643$, $P>0.05$). It was concluded that necessary material resources were not adequately provided for colleges of education and this would affect the effective teaching of business education courses. It was recommended that much-needed physical facilities, equipment and supplies should be provided for business education by the government as stipulated by the NCCE (2020) minimum standards and there should be regular monitoring and supervision by the NCCE for proper utilization of the available physical facilities and equipment.

Irukaku and Arhueremu (2021) examined how much information and communication technology resources were available and used in business teacher education programs in Delta State, Nigeria's education colleges. The survey design used in the study was descriptive. The study was led by two research questions, and two null hypotheses were examined at the significance level of 0.05. Without using a sample, the study's 114 business education instructors from Delta State's four institutions of education were the whole population. Frequency count and simple percentage were used to answer research question one and mean and standard deviation were used to answer research question two. t-test statistic was used to test the hypotheses at 0.05 level of significance. The findings of the study revealed that ICT resources as stipulated by the benchmark of NCCE for business education programmes were not available in colleges of education in Delta State.

During business teacher education programs at Delta State's education colleges, business educators hardly ever used ICT resources. The research also showed that, when it came to the degree to which ICT resources were used in business education programs, business educators in education colleges did not significantly differ in their mean ratings depending on the ownership and location of their respective institutions. The study concluded that the inadequacy and low level of utilization of ICT resources by business educators will negatively affect the technological competencies of business education students to succeed and create a niche of their own in the digitalized business world. It was recommended among others that the management of colleges of education should enter into partnerships with ICT manufacturing organizations to assist in improving the supply of ICT resources in business education programmes. This is to enhance business education students' academic performance and boost the quality assurance indices of the programme.

METHOD

A descriptive survey research design was used in the study. The design was considered appropriate because the study elicited responses from students and lecturers on the availability and utilisation of e-learning technology resources for teaching and learning Business Education subjects in Colleges of Education. The population for the study was 33 Business Education lecturers and 255 NCE III Business Education students from Niger State College of Education, Minna and Federal College of Education, Kontagora. No sampling was done as the population was of a manageable size. The instrument used for data collection was a structured questionnaire that contained 40 e-learning technology resources on a four-point Likert-rating scale. Two specialists from Ahmadu Bello University in Zaria verified the instrument, and when the reliability of the instrument was assessed using the Cronbach alpha coefficient method, the result was 0.81. The study employed the mean and standard deviation to address the two research inquiries posed.

RESULTS AND DISCUSSION

The results underscore the importance of aligning the availability and utilization of e-learning technology resources with the evolving demands of the business landscape. E-learning technology

resources serve as enablers for cultivating critical thinking, problem-solving, and digital literacy, which are integral to preparing future professionals in the field of business.

Research Question one: What are the available e-learning technology resources in teaching and learning Business Education subjects in Colleges of Education in Niger State?

Table 1. Respondents Mean Ratings on the available e-learning technology resources in teaching and learning Business Education subjects.

S/N	Items	$\overline{X}$	SD
1.	Inadequate trained personnel to operate computer software in teaching and learning business education	3.08	0.72
2.	Poor funding from the government for teaching and learning business education	3.15	0.83
3.	Inadequate infrastructure for e-learning education in teaching and learning business education	3.20	0.70
4.	Poor maintenance culture for the available technology resource in teaching and learning of business education	3.05	0.74
5.	Inadequate computer laboratory rooms in teaching and learning business education	3.13	0.83
6.	High cost of purchasing ICT resources in teaching and learning business education	3.44	0.70
7.	Poor power supply in teaching and learning business education	3.25	0.76
8.	Low level of awareness by teachers and students in teaching and learning of business education	2.54	0.75
9.	Inadequate technology resources and materials in teaching and learning business education	3.10	0.78
10.	Low level of computer literacy level among lecturers in teaching and learning business education	2.98	0.80
	Grand Mean	**3.09**	**0.76**

The study reveals the current state of technological integration in the educational sector, with a focus on the use of e-learning technology resources in teaching Business Education subjects. The mean ratings of respondents reveal that while mobile communication gadgets are being used, there is still room for improvement and further integration. Computers and laptops are also being used, showing potential for enhancement. Mobile resources, such as MP3, MP4, and MP5, are relatively more integrated into the teaching and learning process compared to mobile communication gadgets and computers/laptops.

Computer software, such as MS Excel and MS Word, is moderately rated, indicating a reasonable level of integration. Overhead projectors have a similar rating to computers/laptops, suggesting an area for improvement. Electronic whiteboards are more extensively used in teaching Business Education subjects, indicating a higher level of integration compared to other resources. Internet services are a critical component of e-learning, and the mean rating for this item will provide valuable insights into the extent of its integration. These results provide a quantitative understanding of the availability and utilization of various e-learning resources, providing a foundation for further analysis and potential interventions to enhance technological integration in the educational sector. The mean ratings and standard deviations offer a comprehensive understanding of the extent to which various e-learning resources are being incorporated into the teaching of Business Education subjects.

Research Question two: What are the challenges in the use of e-learning technology resources in teaching and learning Business Education subjects in Colleges of Education in Niger State

Table 2. Respondents Mean Ratings on the challenges in the use of e-learning technology resources in teaching and learning Business Education subjects.

S/N	Items	$\overline{X}$	SD
1.	Inadequate trained personnel to operate computer software in teaching and learning business education	3.08	0.72
2.	Poor funding from the government for teaching and learning business education	3.15	0.83
3.	Inadequate infrastructure for e-learning education in teaching and learning business education	3.20	0.70
4.	Poor maintenance culture for the available technology resource in teaching and learning of business education	3.05	0.74
5.	Inadequate computer laboratory rooms in teaching and learning business education	3.13	0.83
6.	High cost of purchasing ICT resources in teaching and learning business education	3.44	0.70
7.	Poor power supply in teaching and learning business education	3.25	0.76
8.	Low level of awareness by teachers and students in teaching and learning of business education	2.54	0.75
9.	Inadequate technology resources and materials in teaching and learning business education	3.10	0.78
10.	Low level of computer literacy level among lecturers in teaching and learning business education	2.98	0.80
	Grand Mean	**3.09**	**0.76**

The study identifies several challenges in the use of e-learning technology resources in teaching and learning Business Education subjects. These include inadequate trained personnel to operate computer software, poor government funding for teaching and learning, inadequate infrastructure for e-learning education, a poor maintenance culture for available technology resources, inadequate computer laboratory rooms, high cost of purchasing ICT resources, and poor power supply. The lack of adequately trained personnel to operate computer software is a significant concern among respondents. Poor funding from the government also hinders the effective integration of e-learning resources. Inadequate infrastructure for e-learning education is another significant challenge, with a mean rating of 3.20 with a standard deviation of 0.70. A poor maintenance culture for available technology resources also contributes to the ineffectiveness of e-learning resources.

Insufficient computer laboratory rooms are another significant challenge, with a mean rating of 3.13 and a standard deviation of 0.83. The high cost of purchasing ICT resources presents a considerable obstacle, with a mean rating of 3.44 with a standard deviation of 0.70. Financial constraints related to acquiring necessary technological tools also hinder the seamless adoption of e-learning resources. Poor power supply significantly impacts the consistent and reliable use of e-learning technology resources in teaching and learning Business Education. Addressing these challenges is crucial to harnessing the full potential of e-learning and enhancing the quality of education delivery.

The study questions the e-learning tools that are accessible for teaching and learning Business Education subjects in Niger State's colleges of education were discussed about the findings. The findings of this study revealed that respondents stated that mobile communication gadgets such as iPads, iTouch and Computer/laptops, use mobile resources such as MP3, MP4 and MP5, Computer software such as MS Excel, MS Word, overhead projector, electronic whiteboard, internet services, Magnetic cards, Electronic graphics board, and electronic readers of the e-learning technology resources are fairly available for the teaching and learning of Business Education subjects in Colleges of Education. This demonstrates that the e-learning technology resources mentioned above are insufficient for teaching and learning Business Education courses in Niger State's colleges of education. The findings of this study agree with Nwabufo and Mamman (2018) who reported that e-learning technologies were relatively

available to teachers and students in Colleges of Education. The findings however contradict, Amiaya (2016) who stated that ICT facilities are not adequately available for teaching and learning in Colleges of Education. The results also support the findings of Salome (2012), who reported that a large number of ICT resources required for teaching and learning in education colleges are unavailable.

On the challenges in the use of e-learning technology resources in teaching and learning of Business education subjects in Colleges of Education in Niger State. The findings of this study showed that inadequately trained personnel to operate computer software, poor funding from the government, inadequate infrastructure for e-learning, poor maintenance culture for the available technology resource, inadequate computer laboratory rooms, high cost of purchasing ICT resources, poor power supply, low level of awareness, inadequate technology resources materials, low level of computer literacy level among lecturers are challenges in the use of e-learning technology resources for the teaching and learning of Business education subjects in Colleges of Education in Niger State. The results corroborate the findings of the Federal Ministry of Education (Moe, 2014), which listed four obstacles to the effective use of ICT: a lack of confidence among some teachers regarding the advantages of ICT; a severe shortage of plasma televisions in educational institutions; a lack of accessories for maintaining plasma televisions nationwide; and a shortage of computers, maintenance, and services in secondary schools (Moe, 2010).

This suggests that these variables will continue to negatively impact business education instruction at Niger State's colleges of education if they are not investigated. The findings however contradict Dambo and Uranta (2018) who stated that teachers lack the required skill to match the technology (Computers and the internet) with innovative pedagogies that benefit students' learning. The findings also contradict those of Olisaemeka (2012), who claimed that the main obstacles schools face that have led to the limited availability and use of ICT facilities are a lack of computers and internet access, funding, teacher training programs, computer lab space, school-based ICT policies, and the shortage of qualified IT teachers and technical assistants.

CONCLUSION

The results also highlight the need for ongoing evaluation and observation of the accessibility and application of e-learning technology resources. This can be accomplished by putting in place systems to monitor how these resources are being used and spot any obstacles or problems that can prevent their efficient deployment. Finally, the study highlights how important it is for educational institutions and pertinent stakeholders to work together to close the gaps in the availability and use of e-learning technology resources. To exchange best practices and resources, this collaboration may entail forming partnerships with technological companies, governmental organizations, and other academic institutions. The study's management implications, in summary, highlight the necessity of deliberate actions to improve the accessibility and uptake of e-learning resources in Business Education classes. Through the consideration of these consequences, educational establishments can proficiently utilize e-learning resources to elevate the quality of instruction and augment the educational journey for students pursuing Business Education. Based on the findings of the study, it was concluded that teachers need to effectively utilize the few available e-learning technology resources for the teaching and learning of business education subjects in colleges of education in Niger State. This will help in increasing business education students' academic performance, motivation and interest which are imperative for a functional educational system in line with global best practices.

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