INTEGRATION AND APPLICATION OF E-LEARNING TECHNOLOGIES TO ENHANCE TEACHING AND LEARNING EXPERIENCE IN BUSINESS EDUCATION PROGRAMS AT PUBLIC COLLEGES OF EDUCATION IN KWARA STATE

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Abstract
The research delved into the examination of the presence and usage of e-learning technologies to enhance the teaching and learning experiences within the business education program across public colleges of education in Kwara State, Nigeria. Two specific research inquiries were raised to direct the investigation. The study targeted a population of 332 individuals, including 30 lecturers and 215 students enrolled in the Department of Business Education at three (3) public colleges of education in Kwara State, Nigeria, namely Kwara State College of Education, Ilorin, Kwara State College of Education, Oro and Kwara State College of Education, Lafiagi. A sample size of 181 was randomly selected through a simple random sampling technique. Employing a descriptive survey design, data was collected via a structured questionnaire utilizing four-point rating scale. The internal consistency of the instrument was verified using Cronbach Alpha reliability formula, yielding a reliability coefficient of 0.92. Analysis of the gathered data was conducted using the Statistical Packages for Social Sciences (SPSS), with mean, and standard deviation utilized to address the research inquiries. The study's findings indicated that several e-learning technologies are indeed available and utilized to a significant extent by both lecturers and students within the business education program. Consequently, it is recommended, among other suggestions that lecturers should be motivated to fully exploit the available e-learning resources in teaching all business education courses, and efforts should be made to encourage the preparation and utilization of e-books to foster students' engagement with electronic reading materials and journals.
Keywords: Integration, Application, E-Learning, Business Education, Teaching

Introduction

The integration of technology into education and training has had a profound impact globally, enhancing the processes of teaching and learning. In the 21st century, access to information and knowledge for both educators and learners has undergone significant transformation, largely due to advancements in Information and Communication Technology (ICT). The adoption of ICT in instructional delivery has given rise to a new approach to learning known as e-learning, which is now widely recognized across educational institutions worldwide. This shift represents a move from traditional, teacher-centered instruction to a more learner-centric model facilitated by e-learning technologies. As noted by Evarest and Laura (2019), e-learning, or electronic learning, is gaining popularity in tertiary institutions globally, driven by the opportunities presented by various technological innovations and an increasing number of students engaging with e-learning platforms and tools. According to the Organization for Economic Co-operation and Development (OECD, 2015), electronic learning, or e-learning, fundamentally involves the utilization of information and communication technologies (ICTs) to enrich and facilitate teaching, learning, and research endeavors. This definition underscores the pivotal role that ICTs play in enhancing educational processes and fostering academic advancement, as emphasized by Eteng and Ntui (2019).

The integration of Information and Communication Technology (ICT) into education has introduced a lexicon of new terms to describe innovative learning methodologies and delivery mechanisms. Newhouse (2019), among these terms are e-teaching and e-learning, which leverage internet-based platforms. The availability of the internet serves as the conduit for the utilization of electronic approaches in education, commonly referred to as electronic learning or e-learning (Akuchie 2018). In essence, e-learning entails the process of teaching and learning facilitated via computers

and the internet. It encompasses the transmission of structured instructional materials from instructors (lecturers) to learners (students) through ICTs. According to Newhouse (2019), e-learning represents a significant shift towards learner-centered education, departing from the traditional teacher-centered approach. It enriches learning content and broadens access to information resources, offering immense potential for advancing knowledge. As noted by Newhouse (2019), fully harnessing the potential of e-learning could lead to expanded access, improved educational quality, and reduced costs.

E-learning technologies have the capacity to revolutionize the learning process, enabling learners to access educational content at their convenience (Erah, 2016). Various methods are employed in e-learning, including systematic feedback systems, computer-based networks, video and audio conferencing, internet resources, and computer-assisted instruction, as highlighted by Ajayi (2018). These delivery methods offer flexibility in terms of how, where, and when learners engage in lifelong learning, opening up new possibilities for just-in-time learning delivery. Both educators and learners are particularly enthusiastic about the transformative potential of e-learning, recognizing its ability to adapt to individual learning needs and preferences (Akinnusi 2017). This shift towards e-learning signifies a paradigmatic change in education, fostering a more dynamic and interactive learning environment conducive to continuous skill development and knowledge acquisition (Akinnusi 2017). E-learning technologies have gained increasing popularity in tertiary institutions, offering diverse functionalities such as tutoring, course management, simulations, course enrichment, programming, and problem-solving (Agboeze, (2021). The internet and computer applications serve as catalysts for the growth of e-learning, facilitating simulation and experiential learning. The abundance of free educational resources available on the worldwide web further enhances its effectiveness in education.

E-learning technologies encompass a range of tools and methods, including computers, the internet, blogs, YouTube, telephones, email, web browsers, virtual classrooms, television, projectors, interactive whiteboards, and more. Pirani (2014) emphasized the importance of adequate and reliable technical infrastructure for institutions to adopt e-learning successfully. Both teachers and students demand e-learning technology due to its cost-effectiveness, flexibility of access, elimination of distance barriers, support for just-in-time training, accommodation of individual differences, and facilitation of alternative pedagogies such as simulation, experiential learning, interactivity, and self-paced learning. Gold (2021) noted that e-learning technologies are applicable across all functional areas of business education, with the only limitation being the creativity of teachers in accessing and utilizing them effectively.

Despite its potential benefits, the adoption of e-learning technology has been relatively slow in many educational institutions, as pointed out by the Organization for Economic Co-operation and Development (OECD, 2015). Nwagbo and Ugwuanyi (2021) argued that the development and utilization of e-learning technologies in developing countries like Nigeria, particularly in the context of business education, lag behind those of developed countries. Business Education programs aim to equip students with the knowledge and skills necessary for success in the workplace. In today's business environment, proficiency in computer programs is essential. According to Newhouse (2019), utilization of e-learning technologies by students in tertiary institutions plays a crucial role in preparing them to effectively use computer and software applications in professional settings. The evolution of information and communication technology (ICT) has led to significant changes in instructional delivery methods. Olumese (2018) identifies three instructional delivery methods in business education: formal education, non-formal education, and informal education, all of which can incorporate ICT tools such as microcomputers, video conferencing, electronic mail, cyberspace, internet resources, teleconferencing, audio conferencing, hypertext, video text, communication satellites, and interactive cable television techniques.

However, the availability of e-learning technologies in Nigerian colleges of education lags behind that of developed countries. Basic tools like computers, printers, scanners, internet access, projectors, websites, and interactive whiteboards are often in short supply and underutilized when available. Nwagbo and Ugwuanyi (2021), many Business Education lecturers lack computer skills beyond basic appreciation courses completed during their academic training, leading them to rely on traditional teaching methods. Olumese (2018), students often prefer using e-learning technologies for social communication rather than academic purposes, contributing to their low utilization in education. Addressing these challenges requires investments in infrastructure and capacity building for both educators and students to effectively leverage e-learning technologies for enhanced learning outcomes in Business Education programs.

Purpose of the Study

The purpose of this study is to evaluate integration and application of E-Learning technologies to enhance teaching and learning experience in business education programs at public Colleges of Education in Kwara State. Specifically, the study aims to achieve the following purposes:

1. To assess the integration of e-learning technologies aimed at improving the teaching and learning of business education programs in public Kwara State College of Education.
2. To determine the extent to which lecturers apply e-learning technologies to enhance the teaching and learning experience within business education programs in public Kwara State College of Education.

Methodology

The study targeted a population of 332 individuals, including 30 lecturers and 215 students enrolled in the Department of Business Education at three (3) public colleges of education in Kwara State, Nigeria, namely Kwara State College of Education, Ilorin, Kwara State College of Education, Oro and Kwara State College of Education, Lafiagi. A sample size of 181 was randomly selected through a simple random sampling technique. Employing a descriptive survey design, data was collected via a structured questionnaire utilizing four-point rating scale. The internal consistency of the instrument was verified using Cronbach Alpha reliability formula, yielding a reliability coefficient of 0.92. Analysis of the gathered data was conducted using the Statistical Packages for Social Sciences (SPSS), with mean, and standard deviation utilized to address the research inquiries.

Results

Table 1
Mean Ratings of Respondents on Integration of E-Learning Technologies for Improving Teaching and Learning of Business Education Programme in Public Colleges of Education in Kwara State.

S/N	Items	A	N/A	Remarks
1	Internet and web browser	75%	25%	Available
2	E-journals	71%	29%	Available
3	Interactive whiteboard	62%	38%	Available
4	Compact disk	83%	17%	Available
5	Digital library	23%	77%	Not Available
6	E-book	45%	55%	Not Available
7	Computer simulation	21%	79%	Not Available
8	Multi-media projectors	65%	35%	Available
9	PowerPoint	82%	18%	Available
10	Video/Teleconferencing	15%	85%	Not Available
11	Computers	90%	10%	Available

12	Smart phones	92%	8%	Available
13	Learning Management System	28%	72%	Not Available
14	E-mail	91%	9%	Available
15	Blog	73%	27%	Available

A= Available, N/A= Not Available

The findings presented in Table 1 indicate that out of the 15 items assessed, 10 items (items 1, 2, 3, 4, 8, 9, 11, 12, 14, and 15) garnered a percentage range of 62% to 92%. This suggests that a majority of the respondents agree that e-learning technologies are available within the business education programs offered by public colleges of education in Kwara State. On the other hand, the remaining five items (items 5, 6, 7, 10, and 13) received percentages ranging from 55% to 85%. This indicates that most respondents perceive these items as not readily available within the business education programs in public colleges of education in Kwara State.

Table 2

Mean Ratings of Respondents on the Extent of Apply of E-Learning Technologies by Lecturers for Improving Teaching and Learning of Business Education Programme in Public Colleges of Education in Kwara State

S/N	Item Statements	$\bar{X}$	SD	Remarks
16	Lecturers use the internet to facilitate teaching and learning.	3.69	0.47	HE
17	Lecturers prefer the use of e-books/e-journals to offline/hardcopy books when sourcing for academic information.	1.80	0.75	LE
18	Video/teleconference is employed by lecturers to enhance teaching and learning. Lecturers use multi-media projectors to present lessons.	1.31	0.47	LE
19	Lecturers use learning management system to post academic information.	3.19	0.69	HE
20	Lecturers use blogs for research. Lecturers employ the use of e-mail in giving and receiving students' assignment.	1.27	0.45	LE
21	Lecturers use e-journals in the publication of journal articles. Lecturers employ the use of digital library in retrieving information	2.77	0.82	HE
22	Lecturers use interactive white board to record video or audio lectures for students.	3.58	0.50	HE
23	Lecturers use the computer to get information online via the internet.	3.58	0.87	HE
24	Lecturers use computer simulations to aid teaching and learning. Grand Mean	1.58	0.50	LE
25	Lecturers use interactive white board to teach abstract contents	2.04	0.96	LE
26		3.92	0.27	HE
27	Lecturers use interactive white board to coordinate class teaching	1.27	0.45	LE
		2.50	0.16	HE

$\bar{X}$= Mean, SD= Standard Deviation, HE=High Extent, LE=Low Extent.

The findings presented in Table 2 provide insights into the responses regarding items 16 through 27, along with their respective mean ratings and standard deviations Items 16, 19, 21, 22, 23, and 26 exhibited mean ratings ranging from 2.77 to 3.92. These values suggest a high extent of utilization, as they surpass the midpoint of 2.50. Conversely, items 17, 18, 20, 24, 25, and 27 received mean ratings ranging from 1.27 to 2.04, indicating a low extent of utilization. The standard deviation for these items ranged from 0.27 to 0.96, suggesting varying degrees of dispersion around the mean ratings. The overall grand mean of 2.50 indicates that respondents generally agreed that e-learning technologies are utilized to a high extent within the context of the Business Education programs. These findings shed light on the level

of utilization of e-learning technologies within the program, highlighting areas of strength as well as areas requiring improvement.

Discussion

The research study focused on assessing the availability and utilization of e-learning technologies to enhance teaching and learning within the Business Education program in public universities. The study identified several e-learning technologies that are highly utilized by lecturers, including PowerPoint presentations, email communication, access to e-journals, computers, and multimedia projectors. However, other e-learning tools such as Learning Management Systems, computer simulations, digital libraries, video/teleconferencing, e-books, and interactive whiteboards for recording audio or video lectures are not widely utilized by lecturers. Contrary to the belief expressed by Maduabuchi (2018) that many Business Education lecturers lack computer skills beyond basic training, the findings of this study suggest that lecturers possess and utilize information and communication technology skills in training students. This finding aligns with the research conducted by Ezenwafor (2021), who also observed that Business Educators in tertiary institutions possess ICT skills and utilize them in their teaching practices.

Additionally, the study examined the extent of utilization of e-learning technologies by students within the Business Education program. The findings revealed that students highly utilize e-learning technologies such as smartphones, computers, compact disks, PowerPoint presentations, and email communication. However, other tools such as e-books, video/teleconferencing, and digital libraries are not as widely utilized by students. Despite the variations in utilization levels among different e-learning technologies, the overall grand mean of 2.71 indicates a high level of utilization by students. These findings support the observations made by Manir (2019) regarding the significant growth in computer equipment and internet utilization by both staff and students in Nigerian tertiary institutions. This updated perspective contrasts with the earlier findings of Ajadi, Salawu, & Adeoye (2018), who reported gross underutilization of e-learning technologies in Nigerian tertiary institutions at the time of their research. In summary, the findings of this study underscore the importance of assessing and enhancing the utilization of e-learning technologies within Business Education programs to promote effective teaching and learning practices in public universities.

Conclusion

The purpose of this study was to assess the availability and utilization of e-learning technologies within the Business Education program in public universities in Enugu State. The findings revealed that several e-learning technologies, such as internet and web browsers, interactive whiteboards, compact disks, multimedia projectors, PowerPoint presentations, computers, and smartphones, are readily available and highly utilized by both lecturers and students in the program. However, certain e-learning tools, including Learning Management Systems, digital libraries, computer simulations, electronic books, and video/teleconferencing, were found to be unavailable and consequently utilized to a low extent by both lecturers and student. The study underscores the significance of e-learning technologies within the realm of business education, emphasizing their pivotal role in teaching, learning, and research. Given the technological advancements of the 21st century, e-learning technologies have become indispensable tools in educational settings. Therefore, embracing these technologies fully is imperative for enhancing the quality of teaching, learning, and research within the Business Education program. In conclusion, the study highlights the importance of recognizing and leveraging the potential of e-learning technologies to improve educational outcomes and promote innovation within the field of business education.

Recommendations

Based on the findings and conclusion drawn from this study, the following recommendations were made:

1. Encouraging Lecturers to Utilize Available E-Learning Resources: It is imperative to motivate lecturers within the Business Education program to fully embrace and utilize the existing e-learning resources in their teaching practices, research endeavors, and student assessment processes. By leveraging e-learning tools effectively, lecturers can enhance the delivery of course content, engage students more dynamically, conduct

research efficiently, and provide timely feedback on student performance. This proactive approach can lead to improved learning outcomes and better preparation of students for their future career.

2. Preparation of E-Books and E-Journals: Business education lecturers should actively engage in the preparation and dissemination of e-books and e-journals to facilitate student learning and encourage independent study. By creating digital resources tailored to the specific needs of their courses, lecturers can provide students with access to comprehensive and up-to-date educational materials. Additionally, e-books and e-journals offer the flexibility of anytime, anywhere access, enabling students to deepen their understanding of course concepts and stay abreast of industry trends.

3. Optimization of E-Learning Platforms: Tertiary institutions' management should prioritize the optimization of e-learning platforms such as learning management systems, open courseware, and Moodle to streamline administrative processes and enhance the overall learning experience. These platforms offer robust features for content delivery, assessment management, communication, collaboration, and data analysis. By ensuring the optimal functioning of these platforms, institutions can facilitate efficient administration, documentation, examination, feedback provision, and reporting of both classroom and online events. This proactive approach will contribute to a more seamless and effective integration of technology in teaching and learning within the Business Education program.

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