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PERCEIVED BENEFITS OF E-LEARNING TECHNOLOGIES BY BUSINESS EDUCATION STUDENTS: IS AVAILABILITY A CONCERN IN UNIVERSITIES

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Abstract

The study explored the benefits of e-learning technologies in business education programmes in universities by considering the concerns of the availability of the technologies. Two research questions and two hypotheses were raised and formulated respectively to guide the study. The study adopted a descriptive survey research design. The population of the study comprised 521 Business Education students at the University of Benin and Benson Idahosa University, out of which 100 students were used as a sample, using the disproportionate stratified random sampling technique. A structured questionnaire containing 17 items was the instrument used for data collection. Having validated the instrument, its reliability was determined using Cronbach's alpha method, which yielded a coefficient 0.84. Data collected were analyzed using mean and standard deviation for the research questions, while t-test and Analysis of Variance (ANOVA) were used to test the hypotheses. The findings of the study revealed that students had several positive perceptions about e-learning technologies for enhancing business education programme to bridge the gap that exists between theories and practice in learning. However, availability of the e-learning resources is a concern because students perceived that the resources were not available in their institutions as expected. Based on the findings it was recommended that relevant shareholders in education should provide adequate e-learning technologies for the teaching and learning process of business education courses.

Keywords. Availability, benefits, business education programme, e-learning technologies.

Introduction

While it is important to state that the traditional approach to learning has over time helped both teachers and students, modern approaches to learning involving the use of technologies have continued to evolve. In recent times, there have been advances in the development of software technology in particular in the field of education. The traditional approach to teaching has been the main and most common medium of teaching and learning all around the world. It is teacher-centered. A traditional classroom is where a teacher moderates and regulates the flow of information and knowledge. A traditional classroom is an educational place where the teacher delivers knowledge to the students in person without any third-party medium. Traditional classrooms have a schedule, and the student is expected to follow the same to learn a particular subject or lesson. In recent times, e-learning resources have been recommended by education stakeholders (Baber, 2020; Beluce & Oliveira, 2015).

E-learning is a learning experience delivered electronically. It is referred to as the use of electronic media and information communication technologies (ICT) in education. E-learning is the act of taking a course online using a modem, wireless or capable connections to access academic course materials from a computer, smartphone, or other devices (Almaiah, Al-Khasawneh, & Althunibat, 2020). E-learning is an inclusive term that describes educational

technology that electronically or technologically supports learning and teaching. Bermejo (2005) defined e-learning as an education that uses computerized communication systems as an environment for communication, the exchange of information, and interaction between students and instructors.

The development of e-learning in Nigeria could be traced back to the development of telecommunication which began in the year 1886 when e-cable connections were established by the colonial masters between Lagos and the colonial office in London to transmit information and receive feedback. By 1893, all government offices in Lagos were provided with telephone services for easy communication, and later, other parts of the country were provided with telephone services (Ajadi & Salawu, 2008). They further stressed that in Nigerian schools, the commonest type of e-learning adopted was in the form of lecture notes on CD-ROM which cannot be played when the learner desire. The challenge of this method is that number of students per computer was unattractive as compared to when lectures are being received in the classroom.

E-learning is a student-centered learning model. Students who study online can plan their schedule, without having to make sacrifices to meet the class attendance requirements of teachers and traditional universities. This can lead to increased student satisfaction and reduced stress resulting in improved learning outcomes. Virtual learning does not need physical lecture halls, which saves costs. An e-learning package can be reused as often as the user wishes without additional costs. E-learning is also flexible in terms of time and place. Learning content is usually made available in short modules and can be paused at any time, during your free time at work – the learning material can be easily made part of your daily routine. Without physical limitations, anyone with internet access can simultaneously access learning opportunities.

With the emergence of the internet and new technologies, e-learning has become a promising solution for Universities that are currently in an environment of intense change. Students are digital natives and use technology as an integral part of their everyday lives. Of most interest is the fact that they use technology extensively for internet searching, socializing, and communication. Students are undergoing a learning process outside the formal environment (the university). Most students study other courses online as a hobby, get informed and gain knowledge, communicate, share materials, information, training, etc., and get their degrees or certificates, in another environment than the formal one.

Studies by the National Center for Education Statistics show a growing demand and acceptance of online learning (Waits & Lewis, 2003), while students who have been involved in e-learning courses are generally positive about their experiences. Furthermore, studies show that students' perception of e-learning in university education may be influenced by several variables. Keller and Cernerud (2002) have identified variables such as age, gender, previous experience with computers, technology acceptance, and individual learning style as major predictive factors when discussing acceptance of technology by students.

Given the benefits of e-learning technologies to students, as theorized in the literature, there is a need to continually embark on studies about the adoption of e-learning in the educational setting. Similarly, since business education programmes (e.g., accounting, office technology, marketing, and consumer education) are meant to produce ICT-based competent graduates needed in modern organizations, concerns about the availability and perceived adoption of e-learning technologies by prospective graduates become of utmost importance. Hence, this study intends to explore students' perceptions of e-learning technologies and if these e-learning technologies are available in Business Education programme in tertiary institutions.

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Research Questions

The study answered the following research questions:

1. What are students' perceptions about e-learning technologies in business education programme in tertiary institutions?
2. Are e-learning technologies available for the teaching-learning process in business education programme in tertiary institutions?

Hypotheses

The following null hypotheses were tested at a 0.05 level of significance:

1. There is no significant difference between male and female student's perception of e-learning technologies in business education programme in tertiary institutions.
2. There is no significant difference in the mean rating of students' perception of e-learning technologies by academic level.

Methods

The study adopted a descriptive survey research design. The population of the study comprised five hundred and twenty-one (521) Business Education 100 level, 200 level, and 400 level students in the University of Benin and Benson Idahosa University, out of which 100 students were used as a sample, using the disproportionate stratified random sampling technique. Questionnaire was structured by the researchers for data collection. The questionnaire comprises 2 sections; Section A (Demographic Data) and Section B (Survey Statements) - which consist of 17 items that addressed the two research questions raised in this study. The questionnaire is a 4-point rating scale. The questionnaire was subjected to face validity. The reliability test of the instrument using Cronbach's alpha yielded a reliability coefficient of 0.84. Data were collected by the researchers with the help of two research assistants. All administered questionnaires were carefully completed and retrieved. Hence there was no missing data.

The data collected from the respondents were analyzed using mean (\bar{x}), standard deviation, two independent sample t-test, and Analysis of Variance (ANOVA). The mean and standard deviation were used to answer the research questions, while two independent sample t-test and ANOVA were used to test hypotheses 1 and 2 respectively at 0.05 level of significance. Decision rule was based on the mean value of 2.50 such that any calculated mean (\bar{x}) equal or greater than 2.50 was regarded as agree while any mean (\bar{x}) less than 2.50 was regarded as disagree. Based on the hypothesis, the probability value (p) was used. If P-value was less than or equal to 0.05, the null hypothesis will be rejected but if the P-value is higher than 0.05, the null hypothesis will be accepted.

Results

Research Question 1: What are student's perception about e-learning technologies in business education programme in tertiary institution?

Table 1: Mean and standard deviation showing student's perception about e-learning technologies in business education programme in tertiary institution

S/N	Items	Mean	SD	Remarks
1	E-learning technologies facilitates understanding of lectures.	3.76	.553	Agreed
2	E-learning technologies facilitates understanding of teaching materials.	3.59	.621	Agreed

3	E-learning would make the teaching and learning of business education courses more interesting.	3.74	.505	Agreed
4	E-learning would lead to effective participation on the part of the students.	3.67	.620	Agreed
5	E-learning makes information easy to grasp and absorb.	3.61	.618	Agreed
6	E-learning gives room for students to be conversant with the operation of modern technologies.	3.72	.552	Agreed
7	The knowledge of e-learning would enable students to fit into the labour market in the present world of technology.	3.78	.484	Agreed
8	E-learning learning helps students to be in sync with modern learners.	3.66	.590	Agreed
9	Students prefer online and computer-based test over the paper and pen test.	3.03	.979	Agreed
10	E-learning technologies have been of great help to me in gaining access to information from different sources.	3.65	.730	Agreed
Aggregated				Agreed

Note: SD = Standard Deviation

In response to research question one, Table 1 shows that the respondents rated item one to ten as agreed with mean ratings ranging from 3.03 to 3.78; while the standard deviation also ranges from .484 to .979. With these results, the aggregated mean rating shows that students had positive perception about e-learning technologies for enhancing business education programme in universities.

Research Question 2: What is the level of availability of e-learning technologies in business education programme in tertiary institutions?

Table 2: Mean and standard deviation showing availability of e-learning technologies in business education programme in tertiary institutions

S/N	Item	Mean	SD	Remarks
11	There are enough computers for business education programme in my school.	2.41	1.261	Disagreed
12	There are enough overhead projectors for business education programme in my school.	2.44	1.284	Disagreed
13	There are enough printers for business education programme in my school.	2.46	1.198	Disagreed
14	There are enough photocopier for business education programme in my school.	2.47	1.186	Disagreed
15	There are enough interactive whiteboard for business education programme in my school.	2.32	1.141	Disagreed
16	There are enough audio enhancement for business education programme in my school.	2.40	1.181	Disagreed
17	There are enough scanners for business education programme in my school.	2.35	1.242	Disagreed
Aggregated				Disagreed

Note: SD = Standard Deviation)

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The data analysis presented in Table 2 depict that the respondents' rated item 11 to 17 as disagreed with a mean rating ranging from 2.32 to 2.47 while the standard deviation also ranges from 1.141 to 1.284. With these results, the aggregated mean score shows that there is a low level of availability of e-learning technologies in business education programme in universities.

Hypothesis 1: There is no significance difference between male and female student's perception of e-learning technologies in business education programme in tertiary institutions.

Table 3: The t-test of difference between male and female student's perception of e-learning technologies in business education programme in tertiary institutions

Respondents	N	Mean	SD	df	t-value	p-value	Decision
Male	37	3.59	.339	98	-.640	.524	NS
Female	62	3.65	.468				

Note. NS = not significant

The test of the hypothesis, as presented in Table 3 reveals mean responses of the difference between male and female students' perception of e-learning technologies in business education programme in tertiary institutions. Male had a mean of 3.59 and female 3.65 while their corresponding standard deviations are .339 and .468. The t-value of -.640, at degree of freedom of 97, which shows it was not significant at p-value of .524. Testing at an alpha value of .05, the null hypothesis was retained since the p-value is greater than alpha value. Thus, there is no significance difference between male and female student's perception of e-learning technologies in business education programme in tertiary institutions.

Hypothesis 2: There is no significance differences in mean rating of student's perception of e-learning technologies by students' academic level.

Table 4: ANOVA showing difference in mean rating of student's perception of e-learning technologies by students' academic level

Sources of Variance	SS	df	MS	F	Sig.	Decision
Between Groups	1.623	2	.811	4.810	.010	Significant
Within Groups	16.363	97	.169			
Total	17.986	99				

From Table 4, the data shows that the F-value of 4.810 with a significance of .010, which is lower than the 0.05 level of significance Hence, the null hypothesis was rejected. Therefore, the null hypotheses which states that there is no significance differences in mean rating of student's perception of e-learning technologies by level is not retained. Consequently, there is a significance difference in mean rating of student's perception of e-learning technologies by level. Thus post hoc test of multiple comparisons was carried in order to determine were the significance lies in the ability level.

Table 5: Post Hoc Test of Multiple Comparison

(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
100 Level	200 Level	.119	.108	.276	-.10	.33
	400 Level	.293*	.095	.003	.10	.48
200 Level	100 Level	-.119	.108	.276	-.33	.10
	400 Level	.174	.104	.098	-.03	.38
400 Level	100 Level	-.293*	.095	.003	-.48	-.10
	200 Level	-.174	.104	.098	-.38	.03

Table 5 shows the post hoc comparison test between the groups based on level of students. The data indicate that the paired comparison between 100 level and 400 level students showed a mean difference of .293 and a significance of 0.003 which is less than the 0.05 level of significance. This, therefore, indicates that there was a significant difference between 100 level and 400 level students. This means 100 level students had different perception compared to 400 level students with regards to the benefits of e-learning technologies in enhancing business education programmes.

Discussion

The result of student's perception of e-learning technologies in business education programme in universities revealed that students had positive perceptions about e-learning technologies enhancing business education programme in universities. This finding corroborates with that of Rasha (2014) study of students' perception of e-learning.

Based on the result of the level of availability of e-learning technologies in business education programme in tertiary institutions, the findings indicated that there is a low level of availability of e-learning technologies in business education programme in tertiary institutions. This finding is in line with that of Madu and Pam (2011) who found out that only a few e-learning facilities were available for teaching and learning in tertiary institutions. He further stated that for teaching and learning to take place effectively in business and management courses, and for students to be able to acquire relevant skills, there is a need for adequate provision of all relevant technologies that will enhance the teaching process.

The result of no significant difference between male and female student's perception of e-learning technologies in business education programme in tertiary institutions revealed that there is no significant difference between male and female student's perception of e-learning technologies in business education programme in tertiary institutions. This finding aligns with that of Olatunji (2011) who noted that the usage of e-learning resources is not influenced by gender. His study shows that both male and female business education students in tertiary institutions in Enugu State did not significantly differ in their perception of e-learning technologies in education.

With respect to the test of no significant differences in the mean rating of student's perception of e-learning technologies by their academic levels, the findings depicted that there is a significant difference in mean rating of student's perception of e-learning technologies by level, this is because 400 level students have been exposed in practice and use of some of the e-learning technologies over time in the department compared to 100 level students who are less experienced and a junior in the level of study. This finding is in support of that of Longjohn,

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Okafor, and Ajala (2020), who revealed that the level of study influences undergraduate students' perception of e-learning slightly.

Conclusion

Based on the findings of the study, it was concluded that students had positive perceptions of e-learning technologies in enhancing business education programmes in universities. The study also concludes that e-learning technologies that will improve the academic performance of students and bridge the gap that exists between theories and practices were not available as expected for teaching and learning business education courses in the sampled universities.

Recommendations

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

1. Relevant shareholders in education should provide adequate e-learning technologies for the teaching and learning process of business education courses in tertiary institutions.
2. The government should make internet connectivity a priority for higher education by creating free and accessible wifi.

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