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Effectiveness of E-Learning Platforms in Delivering Business Education in University of Ilorin, Nigeria

EFFECTIVENESS OF E-LEARNING PLATFORMS IN DELIVERING BUSINESS EDUCATION IN UNIVERSITY OF ILORIN, NIGERIA

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Abstract

The increasing integration of digital technologies in education has transformed how business education is delivered in universities worldwide. Hence, the study investigated effectiveness of e-learning platforms in delivering business education at the University of Ilorin, Nigeria. Specifically, the study examined: (i) the availability of e-learning facilities in teaching business education in University of Ilorin, Ilorin; and (ii) the level of e-learning facilities utilization for teaching business education in University of Ilorin. The study adopted a descriptive research design of correlational type. The population for the study consisted of all 100 and 400 business education students in the Department of Education Management, University of Ilorin. Random sampling technique was used to select 196 students out of the total of 500 business education students. Two sets of instrument tagged “Availability and Utilization of E-learning Facilities Checklist (AUEFC) and a proforma tagged “Students' Academic Performance Proforma (SAPP) were used to collect data needed for the study. The instruments were validated by the experts and also tested for reliability. The reliability coefficients realised for AUEFC was .67. Descriptive statistics of percentage used to answer all the research questions while Inferential statistics of Pearson product-moment correlation statistics was used to test all the hypotheses at 0.05 level of significance. The findings of the study revealed that: e-learning facilities for teaching and learning business education in University of Ilorin were never available; and e-learning facilities for teaching and learning business education in University of Ilorin were never utilized. The study concluded that e-learning facilities were not adequately available for teaching and learning of business education while the limited available one was not utilized. Based on the findings and conclusion of the study, it was recommended among others that government should provide adequate e-learning facilities in school so that effective teaching and learning can take place.

Keywords: e-learning, business education, digital learning, platforms, effectiveness

Introduction

The use of ICT in modern learning environment ranges from slide use of computers in practical aspects to an online learning experience which enhances and improves students' intellectual and learning behaviour (Shukla & Yadav, 2019; Cupiał et al., 2018). With the introduction of computers, the precursor of our modern-day ICT, and the promising potentials of computer-based instruction and learning, many researchers and institutions were motivated to invest viable resources so as to ensure the possibility of computers enhancing learning culture. Previous studies such as Shukla and Yadav 2019; Cupiał et al., 2018 were positively disposed to introduction of computers into the education system because of the expectation that students would benefit quantitatively from computers by providing them with the software and hardware for an effective learning process (Bhaskar, 2019; Wang et al., 2020). The digital age has transformed the way people communicate, network, seek help, access information and learn.

Young people, particularly students, are now an online population and internet access is through variety of means, such as computers, television and mobile phones (Dinesh & Chalawadi, 2016; Woon et al., 2021). Thus, as technology becomes more and more embedded in our culture, students must be provided with relevant and contemporary experiences that allow them to successfully engage with technology and even prepare them for life after school. The use of e-learning tools, it is believed, would have a positive influence on both students' achievement, motivation and learning process. The use of Information Communication Technology, ICT in education lends itself to more student-oriented learning settings. The emergence of e-learning according to Huggins (2022), has tremendously transformed information-handling and management in academic environments.

Classrooms are considered a face-to-face learning environment, yet the installation of ICT equipment such as web-based tools and other technologies would positively influence students' blended learning situation. This is because there appears to be some consensus that both teachers and students feel that ICT use in the class greatly contributes to students' motivation and engagement in learning (Fonseca & García-Peñalvo, 2019)

A very high percentage (86%) of teachers worldwide agree that students are more motivated and attentive when computers are in their study programmes so as to remain relevant in the rapidly changing condition for educational services (Chiu et al., 2023).

For many years, educational researchers have maintained an interest in the effective prediction of students' academic achievement at school. Societies all over the world strive to achieve quality education for her citizenry. In order to achieve this noble course, so many factors must be put into consideration. Among them is the introduction of ICT into education particularly at classroom level a result of technological development. We are in the world of digital age where ICT needs to be introduced into classrooms to enhance learning and develop students' digital experience. Students' learning behavior and understanding have been the issue in many research studies as teachers have been observed complaining of the difficulties involved in classroom management practices due to lack of concentration by the students. This greatly affects the teaching-learning process. It is believed that proper use of ICT will foster learning and motivate students to come to class and engage in classroom activities.

As advanced as the world is, there should be adequate use of e-learning for teaching and learning because the world is moving very fast technology-wise. In recent times, greater attention has been given to e-learning in the area of teaching and learning in Nigerian Universities, therefore it is assumed that e-learning may have positive influence on academic performance of business education students in Nigerian universities (Aboderin & Laleye, 2019; Akpoviroro & Adeleke, 2022; Salaudeen 2014).

The state of e-learning in some Nigerian universities is devastating, most students in Nigerian universities are not aware of availability of e-learning facilities in their schools (Adeniyi et al., 2024), this challenge is majorly attributed to either unwillingness to use or lack of digital infrastructure (Balogun & Abd., 2014; Egbokhare & Iyawe, 2013; Arobieke et al., 2012). Due to the aforementioned, there exist a research gap to determine the relationship between e-learning facilities and academic performance. Thus, main purpose of this study is to examine effectiveness of E-learning facilities on the academic performance of business education student in university of Ilorin, Ilorin. Specifically, the study is to:

1. investigate the available e-learning facilities in teaching business education in University of Ilorin, Ilorin.
2. examine the level of e-learning facilities utilization for teaching business education in University of Ilorin.
3. examine the relationship between the availability of e-learning facilities and business education students' academic performance in University of Ilorin.

Research Questions

The following questions were raised to guide the study:

1. What are the available e-learning facilities in University of Ilorin, Ilorin?
2. What is the level of e-learning facilities utilization in teaching business education in University of Ilorin?
3. Is there any relationship between the availability of e-learning facilities and business education students' academic performance in University of Ilorin?

Research Hypotheses

The following hypotheses were formulated to guide the study

Ho: There is no significant relationship between e-learning facilities and business education students' academic performance in University of Ilorin.

Ho₁: There is no significant relationship between e-learning facilities availability and business education students' academic performance in University of Ilorin.

Ho₂: There is no significant relationship between e-learning facilities utilization and business education students' academic performance in University of Ilorin.

Methodology

The study adopted a descriptive research design of correlational type. The population for the study consisted of all 100 and 400 business education students in the Department of Education Management, University of Ilorin. The study adopted a Research Advisor which was used to select 196 out of 500. Therefore, a random sampling technique was used to select 196 students out of the total of 500 business education students. Two sets of instrument tagged “Availability and Utilization of E-learning Facilities Checklist (AUEFC) and a proforma tagged “Students' Academic Performance Proforma (SAPP) were used to collect data needed for the study. In order to ascertain the validity of the instrument, the drafted copy of the checklist was presented four experts in the Department of Educational Management for necessary corrections and suggestion. The suggestions and corrections made were effected on the drafted copy before administering. Test-retest method was used to ascertain the reliability of the instrument by administering them to ten (10) students outside the randomly selected sample at an interval of two weeks. The data gathered were analyzed using person product-moment correlation statistic and a reliability coefficient of 0.67 was realized. Descriptive statistics of percentage was used to answered the research questions raised while Inferential statistics of Pearson product-moment correlation statistics was used to test the hypotheses formulated at 0.05 level of significance.

Results

Research Question One: What are the E-learning facilities available for business education in University of Ilorin?

Table 1: E-Learning Facilities Availability

SN	Items	AA	FA	NA
1	Desktop Computer	42 (21.4)	55 (28.1)	99 (50.5)
2	Laptop Computer	-	24(12.2)	172 (87.8)
3	Smart phones/IPad	138 (70.6)	56 (28.5)	2 (0.9)
4	Internet Facilities	135 (68.9)	61 (31.1)	-
5	Satellites	-	-	196 (100)
6	Television set	-	59 (30.1)	137 (69.9)
7	Local Area Network (LAN)	-	86 (43.9)	110 (56.1)
8	Radio	-	-	196 (100)
9	Modem Device	18 (9.25)	-	178 (90.8)
10	CD-ROM	-	-	196 (100)
11	Flash Drives	-	23 (11.7)	173 (88.3)
12	DVD	-	-	196 (100)
13	Projectors	28 (14.3)	54 (27.6)	114 (58.1)
14	Digital Camera	-	-	196 (100)
15	Tape recorder	-	-	196 (100)
16	Projector screen	-	-	196 (100)
17	Smart Board	18 (9.2)	107 (54.6)	71 (36.2)
18	Computer Laboratory	111(56.6)	55 (28.1)	30 (15.3)
19	Scanner	-	61 (31.1)	135 (68.9)
20	Printer	10 (95.1)	68 (34.7)	118 (60.2)
21	Photocopier	-	71 (36.2)	125 (63.8)
22	Virtual Classroom	-	-	196 (100)
23	Digital library	116 (59.2)	78 (39.8)	2 (1)
24	Email Account	154 (78.6)	42 (21.4)	-
25	Social network such as Face book, Twitter, Instagram etc.	196 (100)	-	-
26	Video Cassette Recorder (VCR)	-	-	196 (100)
27	Instructional Software packages	-	-	196 (100)
28	Presentation software packages (e.g. MS PowerPoint)	196 (100)	-	-
29	Spread sheet Software Packages (e.g. Excel)	196 (100)	-	-
30	Graphics Packages (e.g CorelDraw)	52 (26.5)	76 (38.8)	68 (34.7)
31	Electricity supply	147 (75)	49 (25)	-
32	Alternative Energy Sources (e.g. Generator, Solar power etc.)	61 (31.1)	50 (25.5)	85 (43.4)
Total Average		1,618 (25.8)	1,075 (17.1)	3,579 (57.1)

Table 1 showed the E-learning facilities availability for business education students in University of Ilorin. It is evident from the Table that, social network, presentation software packages and spreadsheet software packages are adequately available e-Learning facilities for business education students in University of Ilorin. The findings also showed that email account, electricity supply, smart phones/IPad, internet facilities and digital library were also adequately available. The computer laboratory, graphics software packages, alternative energy sources, desktop computer, smart board and projector were fairly available. Furthermore, all other items in the checklist such as local area network, photocopier, scanners, television set, modem devices etc. were found to be lacking for teaching and learning of business education students in the University of Ilorin. In conclusion, majority of the respondents 57.1% supported the view that e-learning facilities for teaching and learning business education in University of Ilorin were never available.

Research Question Two: What is the level of E-learning facilities utilization in teaching Business education in University of Ilorin?

Table 2: Level of Utilization of E-learning Facilities

S/N	Items	AU	FU	NU
1	Desktop Computer	18 (99.2)	107 (54.2)	71 (36.2)
2	Laptop Computer	154 (78.6)	42 (21.4)	-
3	Smart phones/Ipad	38 (19.4)	46 (23.5)	112 (57.1)
4	Internet Facilities	89 (45.4%)	107 (54.6)	-
5	Satellites	--	-	196 (100)
6	Television set	-	19 (9.7)	177 (90.3)
7	Local Area Network (LAN)	-	30 (15.3)	166 (84.7)
8	Radio	-	-	196 (100)
9	Modem Device	-	-	196 (100)
10	CD-ROM	-	-	196 (100)
11	Flash Drives	9 (4.6)	53 (27)	134 (68.4)
12	DVD (100.0%)	-	-	196 (100)
13	Projectors	28 (14.3)	94 (47.9)	74 (37.8)
14	Digital Camera	-	-	196 (100)
15	Tape Recorder	-	-	196 (100)
16	Projector Screen	-	-	196 (100)
17	Smart Board	-	127 (64.8)	69 (35.2)
18	Computer Laboratory	28 (14.3)	40 (20.4)	129 (65.3)
19	Scanner	87 (44.4)	61 (31.1)	48 (24.5)
20	Printer	111 (56.6)	85 (43.4)	-
21	Photocopier	142 (72.4)	54 (27.6)	-
22	Virtual Classroom	-	-	196 (100)
23	Digital library	16 (8.2)	38 (19.4)	142 (72.4)
24	Email Account	-	116 (59.2)	80 (40.8)
25	Social Network such as Facebook, Twitter, Instagram etc.	106 (54.1)	90 (45.95)	-
26	Video Cassette Recorder (VCR)	-	-	196 (100)
27	Instructional Software packages	-	-	196 (100)
28	Presentation Software Packages (e.g. MS PowerPoint)	-	89 (45.4)	107 (54.6)
29	Spread sheet Software Packages (e.g. Excel)	-	102 (52)	94 (48)
30	Graphics Software Packages (e.g. CorelDraw)	22 (26.5)	16 (38.85)	158 (34.75)
31	Electricity supply	152 (77.6)	44 (22.4)	-
32	Alternative Energy Sources (e.g. Generator, Solar power etc.)	-	51 (26)	145 (74)
Total Average		1,000 (15.9)	1,411 (22.5)	3,862 (61.6)

Table 2 shows the level of E-learning facilities utilization in teaching business education in University of Ilorin. It is revealing from Table 2 that laptop computer, printer, photocopier, social network and electricity supply were adequately utilized e-Learning facilities for business education students in University of Ilorin. The Findings also revealed that desktop computer, smart phones/Ipad, internet facilities, projectors, smart board, scanners, email account and spread sheet software were fairly utilized. Furthermore, all other items in the checklist such as local area network, television set, satellites and modem devices etc. were found not to be utilized for teaching and learning of business education students in the University of Ilorin. In summary, majority of the respondents 61.6% supported the view that e-learning facilities for teaching and learning business education in University of Ilorin were never utilised.

Ho: There is no significant relationship between e-learning facilities and business education students' academic performance in University of Ilorin.

Table 3: E-Learning Facilities and Business Education Students' Academic Performance

Variable	N	$\bar{X}$	SD	df	Cal r-value	P-value	Decision
E-Learning Facilities	196	2.88	.65	194	.491	.002	Ho Rejected
Business Education Students' Academic Performance	196	3.11	.85				

*Significant P< .05

Table 3 shows the calculated r-value of .491 while p-value (0.002) is less than the significance level (0.05) for 194 degrees of freedom. Therefore, the hypothesis which states that there is no significant relationship between the e-learning facilities and business education students' academic performance in University of Ilorin is rejected. Therefore, significant relationship exists between the e-learning facilities and business education students' academic performance in University of Ilorin.

Ho₁: There is no significant relationship between the availability of e-learning facilities and business education students' academic performance.

Table 4: Availability of E-Learning Facilities and Business Education Students' Academic Performance

Variable	N	$\bar{X}$	SD	df	Cal r-value	P-value	Decision
Availability E-Learning Facilities	196	3.30	.46	194	.420	.011	Ho ₁ Rejected
Business Education Students' Academic Performance	196	3.11	.85				

*Significant P< .05

Table 4 shows the calculated r-value of .420 while p-value (0.011) is less than the significance level (0.05) for 194 degrees of freedom. Therefore, the hypothesis which states that there is no significant relationship between the availability of e-learning facilities and business education students' academic performance in University of Ilorin is rejected. The finding revealed that there is significant relationship between availability of e-learning facilities and business education students' academic performance in University of Ilorin.

Ho₂: There is no significant relationship between utilization of e-learning facilities and business education students' academic performance.

Table 5: Utilization of E-Learning Facilities and Business Education Students' Academic Performance

Variable	N	$\bar{X}$	SD	df	Cal r-value	P-value	Decision
Utilisation E-Learning Facilities	196	2.87	.86	194	.577	.004	Ho ₂ Rejected
Business Education Students' Academic Performance	196	3.11	.85				

*Significant P< .05

Table 5 shows that the calculated r-value of .577 while p-value (0.004) is less than the significance level (0.05) at 194 degree of freedom. Therefore, the hypothesis which states that there is no significant relationship between utilization of e-learning facilities and business education students' academic performance in University of Ilorin, Ilorin, Nigeria is rejected. It means that statistically significant relationship exists between utilization of e-learning facilities and business education students' academic performance in University of Ilorin, Ilorin, Nigeria.

Discussion of Results

This section gives detailed explanations on the various findings discovered from the research questions raised and the hypotheses tested. For instance, the findings on the e-learning facilities availability for business education in University of Ilorin. It is evident from Table 1 that e-learning facilities requires improvement towards effective educational delivery in business education at University of Ilorin. This finding supported that of Adeyemi (2011) that higher institutions in Nigeria are not adequately equipped with the majority of e-learning facilities. The finding was also in consonant with the findings of the earlier studies by Kamba (2019) who found that e-learning equipment such as interactive white boards, computers, projectors, TV sets, and printers are not adequately provided by the universities in Nigeria. Thus hindering sustainable ICT integration in business education.

The analysis on the level of utilization of e-learning facilities for teaching and learning business education in University of Ilorin as shown in Table 2 shows that e-learning facilities are never utilized for teaching and learning business education in University of Ilorin. The result of this study gave credence to the assertion of Lazarus et.al. (2015) who pointed out that the degree of utilization of e-learning in most schools in rural southern Kenya is neither significantly high nor low. It therefore implies that more research efforts are needed to provide a clear position on this.

The findings on the hypothesis which states that there is no significant relationship between e-learning facilities and business education students' academic performance in University of Ilorin was rejected highlighted in Table 3 shows that there was significant relationship between e-learning facilities and business education students' academic performance in University of Ilorin. This finding confirmed the finding of Lazarus et. al (2015) who found out that e-learning facilities are an important tool for effective teaching and learning to take place. This also corroborates the suggestion of Fayomi, Ajayi and Okorie (2015) that e-

learning facilitate academic studies and self-development outcome. They stressed further that e-learning facilities have substantial effect on academic performance in secondary schools and tertiary institutions.

Conclusion

The result of the study has shown that e-learning facilities were not adequately available for teaching and learning of business education while the limited available one was not utilized. Also, the findings of the study showed that significant relationship exist between the availability and utilization of e-learning facilities and academic performance of business education students' in the University of Ilorin. Therefore, it is concluded that e-learning facilities have a significant relationship with the business education students' academic performance in the sampled University.

Recommendations

- Based on the findings and conclusion of this study, the following were recommended:
- (i) government should provide adequate e-learning facilities in school so that effective teaching and learning can take place;
 - (ii) the University lecturers should be well trained in specific methods in which they could use electronic devices to enhance teaching. This could be achieved by contracting experts to develop curricular for training process;
 - (iii) the lecturers of business education courses should also deem it fit for themselves to be giving assignment and research works that will encourage students effective use of the e-learning facilities provided by the school as this will help to significantly improve their self-independence and development in their respective academic endeavor; and
 - (iv) the business education department should also make it part of her orientation programme for the new student to train the new in-take on how to use the e-learning facilities available in the school for effective learning.

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