

BUSINESS EDUCATORS' AWARENESS AND ADOPTION OF E-LEARNING TECHNOLOGIES FOR EDUCATIONAL INSTRUCTION IN TERTIARY INSTITUTIONS IN SOUTH-SOUTH, NIGERIA

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ABSTRACT

There is need for students of tertiary institutions to enjoy the enormous benefits of e-learning technologies and tools which students use mainly for entertainment and recreation. This necessitated this investigation on the extent business educators in South-south Nigeria are aware of and adopt e-learning technologies for educational instruction. Two research question guided the study and two null hypotheses were tested at 0.05 level of significance. The survey design was adopted for the study. Population of the study was 144 business educators and there was no sampling. The research instrument was a structured 5-point scale questionnaire validated by three experts in ICT and measurement and evaluation. The reliability of the instrument was established using split half method to be 0.81. Mean was used to answer the research questions while t-test was used to test the null hypotheses. The study found that the respondents were highly aware of e-learning technologies and adopt e-learning technologies for class interaction to a very low extent. The study also found that age was a factor in business educators' rating of awareness and adoption of e-learning technologies for educational instruction while sex, years of experience in teaching and type of institution did not affect their response. It was recommended, among others, that management of tertiary institutions should train business educators on the usage of e-learning technologies for education activities.

Keyword: Business Educators, Educational Institution, E-learning Technologies.

INTRODUCTION

In education, instruction is the facilitation of learning towards achieving identified learning goals. Oladosu (2009) viewed instruction as the process whereby the environment of the learner or an individual is deliberately managed to enable the learner learn to exhibit certain behaviours under specified condition(s) or as a response to a specified situation. Educational instruction could be provided through traditional (teacher centered) approach or student-centered approach. Traditional instruction involves the use of conventional means which is largely' face-to-face interaction to convey instructional materials through the use of classrooms and study centers. The

traditional instruction deliver requires the physical presence of students to take place (Alaneme, Olayiwola & Reju, 2008). Riordan (2009) noted that traditional instruction delivery in higher education involves lecturing and presentation of information, and teaching take place mainly within the classroom. Redmann & Kotrlik (2008) described the traditional learner as one who would listen to class lectures, take notes and prepare for written tests. On the other hand, student centered approach is an instructional delivery approach where the learner is an active participant in the learning process, who monitor their learning to develop strategies for learning, and work in collaboration with others. Di Napoli (2004) viewed student centered approach as an active dynamic process where the learner constructs knowledge by interacting with his/her teachers and data gathered through different sources, with the aim of solving a problem or an assigned task. The Geological Society of America (2015) described student centered instructional approach as one which provides opportunities for students to engage in self-learning, for instance is an online search for relevant information using the instructor as a guide to access needed information. Jones (2007), noted that in student centered class, the teacher guides the students, manages their activities and direct their learning; the teacher's role is that of a facilitator rather than an instructor.

In most tertiary institutions in Nigeria, instructional delivery of business education programmes is characterized by face-to-face method of teaching and learning. Mamman & Nwabufu (2014) affirmed that instructional provision in business education programme is carried out using conventional methods in which students are told what to learn, where to learn as well as when and how to learn. This traditional method of providing educational instruction cannot effectively prepare digital age learners for tomorrow's world of works. Rapp (2005) stated that teacher-centered instruction is no longer a viable learning option for today's digital age learners. Furthermore, Polka (2009) noted the need for institutions to migrate from using a teacher-centered model of instruction to a student-centered model of instruction so as to facilitate effective instruction. The advent of the e-learning technological devices has presented challenges to teacher centered mode of instruction delivery. Barnett, Keating, Larwood & Saam (2009) asserted that e-learning technologies such as e-mail, course websites and news groups base, added value to traditional classroom knowledge delivery and have impacted course delivery and design in many colleges and universities. Yuen, Yaoyuneyong & Yuen (2011) asserted that the advent of e-learning as a learning technology has transformed the internet into a global network of interconnected learning. Communities and has changed the ways teachers and students interact. E-learning is an internet-enabled web application which allows people to collaborate, get actively involved in creating content, generating knowledge and sharing information online. O'Reilly (2007) defined e-learning as a web platform and web

applications that run on the platform that provides users control over their own content and facilitate collaboration between individuals and groups. There are numerous e-learning tools/applications with potentials in education. The tools include but are not restricted to: blogs, wikis, social networking, podcasts, virtual worlds and online forum.

Highlighting the benefits of e-learning technologies usage in education, Baxter, Dimitrova et al (2011) noted that e-learning gives students greater degree of independence on how and when they learn and teachers are viewed as supporters in the use of e-learning technologies who coordinate learning and provide feedback to students in their engagement with e-learning tools, e-learning technologies provide a reach, shared virtual learning, where interactions are taking place not only between learners and technology but among learners who share a mutual aim, and the interactions facilitated by an instructor (Vrettaros, Tagoulis, Giannopoulou & Drigas. 2009).

Statement of the Problem

Since technology in advanced countries has enabled more robust learning systems in the areas of mobile learning, digital delivery, student centered and interest driven education, Nigeria is required to take a step forward to integrate ICT into her educational system at all levels to cover the use of e-learning technologies. The problem of this study is that no study has been conducted to access business education awareness and adoption of e-learning technologies for instructional delivery in the south east tertiary institutions. This leaves a gap in knowledge in which this study will fill empirically.

Purpose of the Study

The general purpose of this study is to determine business educators' awareness and adoption of e-learning technologies for educational instruction in tertiary institutions in South-South, Nigeria, specifically, the study sought to:

1. Determine the extent to which business educators in tertiary institutions in South-South, Nigeria are aware of e-learning technologies.
2. Determine the extent to which business educators in tertiary institutions in South-South, Nigeria adopts e-learning technologies.

Research Questions

The following research questions guided the study

1. To what extent are business educators in tertiary institutions in South-South Nigeria aware of e-learning technologies?
2. To what extent do business educators in tertiary institutions in South-South Nigeria adopt e-learning for class interaction?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance

1. Male and female business educators in tertiary institutions in South-South Nigeria do not differ significantly in their mean rating awareness of e-learning technologies for class interaction.
2. Experienced and less experienced business educators in tertiary institutions in south-south Nigeria do not differ significantly in their mean rating of adoption of e-learning technologies for class interaction.

METHOD

The design adopted for the study was survey research design. The study was conducted in six South- South States of Nigeria. The population of the study comprised 144 business educators in universities and colleges of education. The entire population was studied because the number was not too large to warrant sampling. A structured questionnaire with 36 items altogether in two clusters (B1 and B2) was used for data collection. Out of the 144 copies administered, one hundred and twenty- five copies were duly returned and used for data analysis. Data collected were analyzed using mean and standard deviation for the research questions and t-test for the hypotheses. For the research questions real limits of numbers of 4.50- 5.00 (Very High Extent), 3.50 4.49 (High Extent), 2.50-3.49 (Moderate Extent), 1.50-2.49 (Low extent), 0.50-1.49 (Very Low Extent) was used. In testing the hypotheses, the decision rule was to accept the null hypothesis where the p-value is greater than 0.05 and reject the null hypothesis where p-value is less than or equal to 0.05.

RESULTS

The results of the study are presented below;

Research Question 1

To what extent are business educators in tertiary institutions in South-South Nigeria aware of e-learning technologies?

Table I. Respondents' Mean Ratings and Standard Deviation of Awareness of e-learning Technologies

S/N	E-learning Technologies	Mean	SD	Remarks
1.	Blogs	3.38	0.03	Moderate Extent
2.	Wikis	4.09	0.43	High Extent
3.	Facebook	4.84	0.54	Very High Extent
4.	Twitte	4.27	0.14	High Extent
5.	Bebo	3.44	0.55	Moderate

				Extent
6.	LinkedIn	3.93	0.24	High Extent
7.	Friendster	3.83	0.76	High Extent
8.	WhatsApp	4.13	0.54	High Extent
9.	MySpace	3.83	0.14	High Extent
10.	YouTube	3.49	0.55	Moderate Extent
11.	Flickr	4.27	0.24	High Extent
12.	2go	3.44	0.76	Moderate Extent
13.	Badoo	3.88	0.54	Moderate Extent
14.	Virtual Worlds/Virtual Learning Environment	3.83	0.43	Moderate Extent
15.	Podcast	3.12	0.54	Moderate Extent
16.	Online discussion forum	4.39	0.14	High Extent
Aggregate X and SD		3.89	0.87	

High Extent

The data in Table I reveal the respondents' rating of awareness of e-learning technologies. The Table shows that seven items out of the sixteen items had mean values ranging from 3.12 to 3.49 which fell within the range regarded as 'moderate extent'. Light items had mean values ranging from 3.83 to 4.39 which fell within the range regarded as 'high extent' while one item had a mean value of 4, 84 which fell within the range regarded as 'very high extent'. However, with the mean of means of 3.89 which fell within the high extent range, it showed that the respondents were aware of e-learning to a high extent. Additionally, Friendster and 2go had a standard deviation value of 0.76 each. This showed how wide apart the opinions of the respondents were in rating the web tools.

Research Question 2

To what extent are business educators in tertiary institutions in South-South Nigeria adopt e-learning for class interaction?

Table2. Respondents' Mean Rating and Standard Deviation on Adoption of e-learning Technologies for class Interaction.

S/N	Applications of web 2.0 for class interaction	Mean	SD	Remark
1.	Use blogs to read contents from students.	1.25	0.34	Very Low Extent
2.	Use blogs to explain concepts for students.	1.31	0.51	Very Low Extent

3.	Use blogs to post study guides to students.	2.24	0.44	Very Low Extent
4.	Use blogs to group students for collaborative peer learning.	2.18	0.32	Very Low Extent
5.	Use wikis to share digital files with students.	1.32	0.24	Very Low Extent
6.	Use wikis to modify contents in collaboration with students.	1.18	0.18	Low Extent
7.	Use wikis to assign portfolio pages for students to display work.	1.26	0.45	Low Extent
8.	Use social networks group page to send announcements about class to students.	1.19	0.34	Very Low Extent
9.	Use social networks group page to schedule events that related to lesson for students.	2.08	0.64	Very Low Extent
10.	Use social networks group page to post notes for students to read.	1.53	0.52	Very Low Extent
11.	Use podcasts to air audio lecture recording for students to download.	1.23	0.41	Very Low Extent
12.	Use podcasts to publish video demonstrations for students to down load.	1.27	0.34	Very Low Extent
13.	Use virtual worlds Virtual Learning Environment to simulate lessons for students with special needs.	1.08	0.19	Very Low Extent
14.	Use virtual worlds to create thematic units to explain complex ideas.	1.01	0.13	Very Low Extent
15.	Use online forum to clan I rules expectations to students.	1.24	0.25	Very Low Extent
16.	Use online forum for lesson discussion with students.	1.23	0.32	Very Low Extent
17.	Aggregate $\bar{x}$ and SD	1.41	0.80	very low extent

The data in Table 2 show that four out of the sixteen items on adoption of e-learning technologies for class interaction had mean values of 2.08 to 2.24 which fell within the range regarded as low extent while the remaining twelve items had mean values ranging from 1.01 to 1.32 which fell within the range regarded as very low extent. Nevertheless, with the mean of 1.41 which fell within the range regarded as very low extent show that the respondents adopt e-learning technologies for class interaction to a very low extent. The standard deviation which ranged from 0.13 to 0.64 shows how wide apart the respondents opinion is in rating the items.

Hypothesis 1:

Male and female business educators in tertiary institutions in South-South Nigeria do not differ in their mean ratings of adoption of e-learning technologies for class interaction.

Table 3. t-test of difference between the mean rating of male and female business educators on adoption of Web 2.0 - technologies for class interaction

Gender	N	$\bar{X}$	SD	DF	t-test	p-value	Remarks
Male	72	2.19	0.65	20	1.24	0.24	Not significant
Female	72	1.91	0.44				

The data in Table 3 reveal the t-test of difference between the mean ratings of male and female business educators on the adoption of e-learning technologies for class interaction. The p-value of the test is 0.24 which is greater than 0.05. This provides evidence that the null hypothesis of no significant difference is not rejected. This means that there is no significant difference between the mean ratings of male and female business educators regarding adoption of e-learning technologies for class interaction.

Hypothesis 2

Experienced and less experienced business educators in tertiary institutions in South-South Nigeria do not differ in their mean rating of adoption of e-learning technologies for class interaction.

Table 5. t-test of difference between the mean rating of experienced and less experienced business educators on adoption of e-learning technologies for class interaction.

Years of experience	N	$\bar{X}$	SD	DF	t-test	p-value	Remarks
Experienced	74	1.98	0.50	20	0.14	0.69	Not significant
Less Experienced	70	2.05	0.60				

The data in Table 5 show t-test of difference between mean rating of experienced and less experienced business educators on adoption of e-learning technologies for class interaction. The p-value of the test is 0.69 which is

greater than 0.05. This provides evidence that the null hypothesis of no significant difference is not rejected. This means that there is no significant difference between the mean ratings of experienced and less experienced business educators regarding adoption of e-learning technologies for class interaction.

DISCUSSION

Findings showed that business educators in tertiary institutions South-South Nigeria were aware of e-learning to a high extent. This finding is in agreement with the findings of Ajise & Fagbola (2013) who reported a high level of awareness of e-learning lecturers in tertiary institutions in Nigeria.

With regards to the adoption of e-learning technologies for class interaction, sixteen activities using e-learning for class interaction were listed. The adoption of four activities out of the sixteen activities was rated low extent while the adoption of the remaining twelve activities was rated very low extent by the respondents. On the other hand, an aggregate mean of 1.41. Which fell within the range of very low extent, indicated that respondents adopted e-learning technologies far class interaction to a very low extent. This finding is in line with the findings of Olasina (2011) who reported a low adoption of e-learning teaching and learning processes.

With reference to the first hypothesis, the findings revealed that male and female business educators did not differ significantly in their mean rating of awareness e-learning technologies of e-learning technologies for class interaction. This finding is in line with the findings of Quadri (2014) who found that age does not have significant effect on teachers' use of e-learning technologies to teach. With regards to the second hypothesis, the finding showed no significant difference in the mean rating of the respondents. This finding is in line with the discovery of Yeun, Yaoyuneyong and Yeun (2011) who stated that years of experience in teaching does not affect teachers adoption-learning technologies of in teaching and learning.

Conclusion and Implications of the Study

It is concluded from the findings that awareness of e-learning technologies has not resulted in its adoption in the instructional process. Business educators' degree of awareness of these e-learning is not matched with their utilization for class instruction. This implies that instructional delivery in tertiary institutions in south east Nigeria is not structured around learners' interest as to allow the learners to seek appropriate resources and to support the development of learning outcomes of contemporary learners. It was also concluded that young business educators use e-learning technologies for instructional purposes more than older business educators. This could be because the older business

educators are digital immigrants who were not educated with these web tools. The implication is that it could be necessary to sensitize and train older business educators on the use of e-learning technologies for educational instruction

RECOMMENDATIONS

The following recommendations were made based on the findings and conclusion of the study:

1. Management of tertiary institutions should train business educators on the usage of e- learning technologies for education activities.
2. The government of Nigeria should embark on a massive computer literacy training programme nation-wide particularly for teachers and learners at all levels. This should be accomplished through in-service training for teachers, workshops, seminar, and conferences.
3. All classrooms and auditoria in higher education institutions in Nigeria should be connected to the internet in order to enhance web-based instruction. The government should do this by paying internet connection fees to Internet service providers (ISP) to provide internet services to all institutions of learning.

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