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REFERENCES

- Abdul-Salaam, A. O. (2007). The role of information and communication technologies in Nigerian educational system. Journal of Science and Science Education, 1(2), 177
- Adeshina, T. J; Udo, A; Udomi, B. & Aliyu, M. (2012). Impact of information technology skills of male and female secretarial teachers in Nigeria colleges of Education on utilization of internet for effective lecture delivery. Educational Research, 3 (8), 632 635.
- Ajaero, O. (2010). Enhancing accounting education in tertiary institutions in Nigeria. The role of ICT. Book of readings in Business Education, 1(10), 34 40
- Dlodlo, N.& Sithole, N. (2001). The internet as a tool for a revolution in education in Africa. A dream or reality. World conference on educational multimedia, Hypermedia and Telecommunication, 2001(1), 425 430, retrieved November 14, 2013 from http://dl. Aace. Org/8489.
- Egboka, P. (2012). The status of information and communications technology (ICT) in empowering policy implementation in universities in south east zone of Nigeria. International Journal of Educational Research and Development, 4(1), 231 236.
- Enguage, B. (2002). The uses of ICT in Education, http://en Wikibooks. Org/wiki/ICT in Education. Retrived march 27,2013
- Iji, C. O. (2005). Information and communication technology (ICT) in school mathematics implication for primary schools. Stand 44th Annual Conference Proceedings pp 172
- Laudon, K. C; Laudon, J. P. (2000). Management information system New Jersey Prentice Hall Inc.
- Ojaleye, O. (2002). Promoting the utilization technology education in mathematics class among pre service teachers. A paper presented at the mathematics education summit held at NMC Abuja.
- Richard, I.O. (2011). Innovations in teaching and learning experiences. The Educational *Psychologist*, *5*(1), 1-12.
- School Net (2007). Teacher competencies for ICT integration; available at www.schoolnet.edu.lb/exams.htm
- Tarig, Y. J; Ayed, H. E. & Taysee, M. K. (2007). Vocational education teachers' adoption of information and communication technology (ICT) in the Jordanian secondary vocational schools .Journal of Educational and Social sciences and Humanities, 19(2), 13 54
- UNESCO. (2002). Information and communication technologies in development of UNESCO perspective. Paris: ITU/UNESCO 1996 IV, 30cm (cii 96/ws/6 Retrieved on 10/10/2013

XTENT OF UTILIZATION OF e-LEARNING TOOLS AS TEACHING STRATEGIES BY BUSINESS EDUCATORS IN TERTIARY INSTITUTIONS IN SOUTH-EAST NIGERIA

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Abstract

The study investigated the utilization of e-learning tools as teaching strategies by business educators in tertiary institutions in south east Nigeria. Two research questions were posed and answered while two null hypotheses were formulated and tested at 0.05 level of significance. A descriptive survey design was adopted. A total of 200 business educators in 14 tertiary institutions in South East, Nigeria made up the population of the study. No sample was taken, as the number was sizeable for the researchers to handle. A structured 25-item validated questionnaire was used for data collection. The reliability of the instrument was ensured using pilot test technique, which was analyzed using Cronbach alpha method and yielded reliability co-efficient of 0.76. Data related to the research questions were analyzed using mean and standard deviation while z-test statistic was used to test the null hypotheses. The findings from the study revealed that multi-media and internet tools were used as teaching strategies but to a moderate extent. The study also revealed that type of institutions do not significantly affect the utilization of e-learning tools (multimedia and internet) as teaching strategies in tertiary institutions in south east, Nigeria. It was concluded that business educators utilized multimedia and internet tools as teaching strategies to a moderate extents as a result of insufficient training and retraining given to them. To encourage the use of e-Learning tools as teaching strategies by business educators, it was recommended, among others, that business educators should develop themselves by inservice training. They should also constantly use e-Learning tools provided by the government and administrators of institutions in teaching tasks.

Key words: e-Learning tools, teaching strategy, utilization, multimedia, internet, business educators

Introduction

The 21st Century has witnessed the advancement of learning technologies especially that of electronic learning. According to Naidu (2006), e-Learning incorporates all

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educational activities that are carried out by individuals or groups working online or offline, and synchronously or asynchronously via networked or stand-alone computer and other electronic devices. In developed countries, learning is made easier as a result of easy accessibility to multi-media, internet service, and other electronic devices. Multimedia is defined by Doty, Popplewell, and Byers (2011) as a ray of computer-driven interactive communication system, which create, store, transmit and retrieve textual, graphic and auditory networks of information. To the researchers, multimedia is the combination of various digital media types such as CD-Row, interactive radio, virtual lab, interactive white board (IWB), among others. Internet involves the change from traditional pedagogical practices that underpin teaching processes because they are teacher-centered methods. Where business educators are not placed with internet tools like virtual library, face book site, google search engine, and blogs, the issue of using them will be a mere tale. Some business educators have personally adopted the use of computer and internet connection as e-Learning tools (Ipaye, 2011). Similarly, Kling in Bupo (2014), defined internet as a new broadcast that can be used in any part of the world in a synchronized way, online or offline, get together text, sound video and provide services like e-mail, data transfer, video conferencing.

Strategies are activities that are implemented towards the achievement of stated measurable objectives (Olowe, 2011). They describe the actions to be taken in order to achieve each objective. Teaching strategies thus refer to specific ways or action plans that could be adopted to improve teaching and learning (Ekpenyong, 2011). Teaching strategies involve the use of variety of teaching methods and techniques. The fundamental importance of teaching strategies is to make it easier to implement a variety of teaching methods and techniques. Teaching strategies that could be adopted to enhance the process of teaching for learning include blended and online learning, brainstorming, case studies, debates, problem solving, flipped classroom, questioning, simulations and teaching diverse groups.

Multimedia and internet tools as teaching strategies help teachers and students in research works, assignments and projects in business education. In the area of research, it provides opportunities for scholars to communicate with one another through e-mail, mailing list and new groups chart rooms. These resources enable communication between scholars as they can post research, assignments, books or journal list references to online materials (Yusuf & Onansanya, 2004). They engage students and provide valuable learning opportunities.

Okereke in Bupo and Ndinechi (2015) reported that in the developed countries, various electronic tools have been used to aid education. Bupo and Ndinechi further stated that electronic mail, real time text conferencing, and online tutorials have been used in the teaching and learning process for several years. Some e-learning platforms used in the developed countries, as listed by Ipaye (2011), include websites, wikis, blogs, second life, email, twitters, course management systems, video/audio podcasts, facebook, threaded discussion lists, video/audio text chat, video-conferences software.

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Electronic learning tools as teaching strategies appear to be poorly utilized in Nigerian tertiary institutions. Inije, Utoware and Kren-Ikidi (2013) reported that poor utilization of e-learning tools as teaching strategy was as a result of shortage of qualified staff with e-learning application, lack of e-learning facilities and infrastructure, as well as not training and retraining of lecturers to acquaint them with the development of new technologies. It appears that business educators in many institutions still do not have basic training and retraining on the use of e-learning tools; cannot operate a computer and have little knowledge of e-learning platforms. As posited by Ohakwe and Njoku (2010), e-learning utilization is influenced by business educators' computer literacy, adequate fund available to schools for training of their teachers in e-learning skills, lack of equipment and electronic devices, and constant electric power failure that forms the basis for e-learning integration. Others rely on traditional mode of teaching and learning. The importance of these e-Learning tools cannot be over emphasized. Internet tools for teaching strategies will lead to better teaching and learning processes which is learner-centered.

The influencing factor in the utilization of e-Learning tools as teaching strategies in business education could be type of institutions. Type of institutions in this research study means tertiary institutions that offer business education programmes such as colleges of education and universities. Okiki (2011) pointed out that the utilization of e-Learning tools is influenced by the stakeholders. As noted by Volman and Van Eck in Vencatachellum and Munusami (2006), one of the stakeholders is the educational institutions. Others include the students, the instructors, content providers, technology providers, accreditating bodies and employees. They also noted that budgeting factors in a country could make the procurement of e-Learning tools for teaching strategies by institutions difficult or easy, as the case may be. Okebukola in Okoro (2008) stressed that e-Learning tools are not part of classroom technology in over 90 percent of tertiary institutions in Nigeria. Thus, the chalkboard and textbooks continue to dominate classroom activities. Business educators themselves need training in areas of e-learning competence to be able to integrate e-Learning tools efficiently and effectively in their teaching tasks.

Business education is a component of vocational technical education programme, which prepares individuals for careers in business and to be intelligent consumers of economic goods and services. One vital need in the present business environment is the staff's ability to use computer programs for different purposes. The usage of e-learning tools as teaching strategies by business educators in tertiary institutions will lay the foundation for computer and software utilization in the business environment by business education students. It seems to the researchers that the extent to which Business Educators in tertiary institutions utilize e-learning tools as teaching strategies has not been sufficiently established, and that necessitated this study. This study is focused on determining the extent of utilization of e-learning tools as teaching strategies by Business Educators in tertiary institutions in south east, Nigeria.

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Statement of the Problem

There appears to be under-utilization of electronic devices as teaching strategies for educational purposes by business educators. Inije, Utoware and Kren-Ikidi (2013) held that under-utilization of e-learning tools as a teaching strategy was as a result of shortage of qualified staff with e-learning application, lack of e-learning facilities and infrastructure, lack of training and retraining of lecturers to acquaint them with the development of new technologies, among others. It could result to teaching and learning continuing to be teachercentered rather than learner-centered. It could also hinder collaborative, active and lifelong learning. Manir (2009) pointed out that lack of computer culture among business educators will impede the integration of new technologies in the educational process. This has prompted this study.

Purpose of the Study

The purpose of this study is to determine the extent of utilization of e-Learning tools as teaching strategies by business educators in tertiary institutions in South East, Nigeria. Specifically, the study sought to determine the extent of utilization of:

- Multimedia tools as teaching strategy for e-Learning by business educators in tertiary institutions in south east Nigeria.
- Internet tools as teaching strategy for e-Learning by business educators in tertiary institutions in south east Nigeria.

Research Questions

The following research questions guided the study:

- To what extent do business educators in tertiary institutions in south east, Nigeria utilize multimedia tools as teaching strategy?
- To what extent do business educators in tertiary institutions in south east, Nigeria utilize internet tools as teaching strategy?

Hypotheses

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

- Business educators' do not differ significantly in their mean ratings on the extent of utilization of multimedia tools as teaching strategy for e-learning based on type of institution (colleges of education and universities) in south east, Nigeria.
- There is no significant difference in business educators' mean ratings on the utilization of internet tools as teaching strategy for e-learning as a result of type of institution (college of education and university) in south east, Nigeria.

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Method

Descriptive survey design was adopted for the study. The researchers considered this design appropriate for this study since it intended to collect data from practicing business educators regarding the extent of utilization of e-Learning tools as teaching strategies by business educators in tertiary institutions in south east Nigeria. The population for the study consisted of 200 business educators from eight colleges of education and six universities that offer business education in south-east Nigeria. No sample was taken for the study because the population size was manageable for the researchers to handle. The instrument for data collection was a structured questionnaire titled "Extent of Utilization of e-Learning Tools as Teaching Strategies by Business Educators (EUE-LTTSBBE)". The instrument was validated by three experts, from the Department of Vocational Education and the Department of Educational Foundations, Nnamdi Azikiwe University, Awka.

To ascertain the internal consistency of the data instruments, the researchers conducted a pilot test whereby copies of the instrument were administered to 20 business educators from Delta State University, Abraka who were not part of the population of the study. The data were analyzed using Cronbach alpha method to determine its degree of reliability. The analysis yielded a co-efficient of 0.76 indicating that the instrument was reliable for the study. The administration of the instrument was carried out personally by the researchers with the aid of five research assistants who are business educators. A total of 200 copies of the questionnaire were distributed to the respondents, 194 copies were returned by the respondents, and were used for data analysis. Data collected regarding the research questions were analyzed using descriptive statistics (mean and standard deviation) for the two research questions. The z-test was used to analyze the hypotheses. The decision rule regarding the research questions were based on the real limit of numbers.

With reference to the research questions, the decision was that items with mean ratings of 4.50-5.00 were regarded as "very high extent". Mean ratings from 3.50-4.49 were considered as "great extent". Mean ratings that range from 2.50-3.49 were regarded as "moderate extent". Mean ratings from 1.50-2.49 were regarded as "small extent", while mean ratings between 0.50-1.49 were regarded as "very small extent". The null hypothesis was rejected where the calculated z- value was equal to or greater than the critical z- value: otherwise the null hypothesis was not rejected.

Results

Research Question 1:

To what extent do business educators in tertiary institutions in south east Nigeria utilize multimedia tools as teaching strategies?

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Dr. Nwazor, J.C. & Udegbunam, E.O. Table 1: Business educators' mean rating on the extent of utilization of multimedia tools as

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Colleges of

Education 125 2.62 1.12

As shown in Table 3, business educators in universities in south east Nigeria recorded a mean score of 2.80 on their utilization of multimedia tools as teaching strategy. On the other hand, business educators in colleges of education had a mean score of 2.62 on their ratings of utilization of multimedia tools as teaching strategy. The z-calculated value of 0.85 is less than the z-critical value of 1.96 at 192 degree of freedom at 0.05 level of significance and this suggests that business educators in south east Nigeria do no differ significantly in their mean ratings on the extent to which multimedia tools are utilized as teaching strategy as a result of type of institution (university or college of education). The null hypothesis was therefore, not rejected.

Null Hypothesis 2

There is no significant difference in business educators' mean ratings on the utilization of internet tools as teaching strategies for e-learning as a result of type of institution (college of education and university) in south east, Nigeria.

Table 4: z-test result analysis of colleges of education and universities business educators on the extent of utilization of internet tools as teaching strategies for e-learning.

N = 194								
Type of Institution	N	Mean SD		D f		z-cal	z-crit	Remark
Colleges of								
Education	69	2.66	1.42					
				0.05	192	-1.26	1.96	Not rejected
Universities	125	3.07	1.44					

Data in Table 4, indicate that business educators in universities in south east Nigeria had a mean score of 2.66 in their utilization of internet tools as teaching strategy while those in the colleges of education had a mean score of 3.07. The z-calculated of -1.26 is less than the zcritical value of 1.96 at 192 degree of freedom at 0.05 level of significance. Since the zcalculated value was less than the z-critical value, the null hypothesis was not rejected. This implies, therefore, that there is no significant difference in business educators in south east Nigeria mean ratings on the utilization of internet tools as teaching strategy as a result of type of institution (colleges of education and universities). The null hypothesis was therefore, not rejected.

Discussion of Findings

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Findings of the study in the first research question revealed that business educators used multimedia tools as teaching strategy such as animation to a small extent in this study with a mean of 2.47. This agreed with the views of Azubuike and Offordile (2012) that multimedia tools in business education were not extensively used by business educators, while traditional approach are more often used by business educators because tertiary institutions lacked some of multimedia tools. Problems facing the use of multimedia in teaching and learning include poor power supply, financial problems, low computer literacy level, low quality and expensive nature of the use of multimedia in teaching and learning. The findings also agreed with Chinlen (2003) who pointed out the issue of inadequate skilled manpower and high cost of equipment for instructional delivery.

The results in Table 3, revealed that business educators did not differ significantly in their mean ratings on the extent of utilization of multimedia tools as teaching strategies in tertiary institutions in South east Nigeria as a result of type of institutions (universities and colleges of education). This means that the institution type does not affect the utilization of multimedia tools as teaching strategy. Business educators in the universities and those in the colleges of education equally utilized multimedia tools as teaching strategies in tertiary institutions in South east Nigeria.

The findings of the study on the second research question also revealed that extent of utilization of internet tools as teaching strategies by business educators in tertiary institutions in south east Nigeria was at a moderate level with the means ranging from 2.56-3.16 respectively, while only item 25 (wiki search engine) was used to a small extent with a mean of 2.29. The data collected showed that some of these internet tools were utilized to a moderate extent due to lack of ICT technical support and may be attributed to the limited number of business educators who are proficient in the usage. The findings also agreed with Nadiu (2006) who remarked that internet tools have the potential to increase students' confidence in accessing learning experiences anytime and anywhere. Nwaosa and Okolocha (2013) revealed that business educators utilize internet tools as teaching strategies in business education to a small extent due to poor internet connectivity, shortage of qualified staff with internet application skills, lack of interest in using them in their teaching and due to their negligence, deliberate attempt or as a result of their lack of readiness to change.

Results in Table 4, revealed that there was no significant difference in business educators' mean ratings on the extent of utilization of internet tools as teaching strategies as a result of type of institutions (colleges of education and universities). This means that the institution type did not affect the extent of utilization of internet tools as teaching strategies by business educators. Business educators in colleges of education and universities viewed internet tools as teaching strategies in business education especially for posting of research works, books, journals, list of references.

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Based on the findings of the study, it was concluded that business educators in tertiary institutions in south east Nigeria utilized multimedia and internet tools as teaching strategies at moderate extent as a result of insufficient training and retraining given to them. The outcome of the study also revealed that type of institutions did not affect the extent of utilization of e-learning tools as teaching strategies by business educators as an instructional delivery in tertiary institutions in south east Nigeria.

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Recommendations

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

- (1) Business educators should realize that a lot of changes are going on in education and the business world and therefore should develop themselves and constantly use e-Learning tools as teaching strategies in teaching tasks.
- (2) Inservice training programmes such as seminar, inservice course, conferences and workshops on the use and operation of new learning technologies should be made compulsory for all practicing business educators and lecturers from tertiary institutions in south-east Nigeria.
- Business educators in tertiary institutions in South east Nigeria should basically be (3) involved in the use of e-learning tools provided by the government and administrators of institutions in teaching tasks.

REFERENCES

- Azubuike, O. C. & Offordile, S. (2012). Strategies for improving the use of electronic teaching and learning (E-Learning) for vocational education in tertiary institutions of Anambra State-Nigeria. Mediterranean Journal of Social Sciences, 2(6), 123-129. Retrieved from www.mcser.org/......
- Bupo, G. O. & Ndinechi G. I. (2015). Business education students' utilization of elearning in Anambra State tertiary institutions. International Journal of Scientific *Research and Innovative Technology*, 2(4), 16-25.
- Chinlen, C. (2003). The use of ICT in technical and vocational education and training. Moscow: UNESCO Institute for Information Technologies in Education.
- Doty, D. E., Popplewell, S. R. & Byers, G. O. (2011). Interactive CD-ROM storybooks and young readers' reading comprehension. Journal of Research on Computing in

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NAU Journal of Technology & Vocational Education

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- Education, 33(4), 374-384.
- Ekpenyong, L. E. (2011): Foundations of technical and vocational education: Evolution and practice for Nigerian students in TVE and adult education, policy makers and practitioners (3rd ed.). Benin City: Ambik press.
- Inije, G. O., Utoware, J. D. A. & Kren-Ikidi, P. C. (2013). Utilization of e-learning technologies in business education instructional delivery in colleges of education in Delta State of Nigeria. International Journal of Education and Research, 2(5), ISSN: 2201-6333(print): 2201-6740 (online) from www.ijern.com.
- Ipaye, B. (2011). e-Learning in a Nigerian open university. Retrieved from http://linc.mit.edu/linc2010/proceedings/session1Ipaye.pdf
- Manir, K. A. (2009). Problems, challenges and benefits of implementing e-learning Nigerian universities: An empirical study. International Journal of Educational *Technology*, 4(1), 66-69. Retrieved from http://www.i-jet.org.
- Naidu, S. (2006). e-Learning: A guide book of principles, procedures and practices. New Delhi India: Commonwealth Educational Media Centre.
- Nwaosa, I. P. & Okolocha, C. C. (2013). Extent of utilization of available e-learning technologies by business educators in tertiary institutions in Edo and Delta states of Nigeria. International Journal of Education and Research, 2(5), 21-35. Retrieved fromwww.ijern.com.

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Ohakwe, S. N. & Njoku, U. (2010). ICT access to education and quality standards

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- tripartite problems in polytechnic education. Business Education Journal, 7(2), 239-244.
- Okiki, C. O. (2011). Information communication technology support for an e-learning environment at the University of Lagos, Nigeria. Retrieved from http://www.faqs.org/periodicals/ 201102/2296746331.html
- Okoro, F.N. (2008). Application of information and communication technology (ICT) in business education instructional methods in Nigerian universities. International *Journal of Educational Research*, 8(1), 21-27.
- Olowe S.U. (2011). The agonies of Nigerian teachers. Ibadan: Heinemann Education Publishers Limited.
- Vencatachellum, I. & Munusami, V. (2006). Barriers to effective corporate e-Learning in Mauritius. Retrieved from http://uom.academia.edu/documents/0073/5832/ Barriers_to_effective_corporate_elearning_in_Mauritius.pdf
- Yusuf, M. O. & Onasanya, S. A. (2004). Information and communication technology ICT and teaching in tertiary institutions. In teaching in tertiary institutions, Ogunsakin, E. A. (Ed.). Faculty of Education, university of Ilorin, Ilorin, Nigeria.

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