Extent of Utilization of E-Learning Resources by Business Education Students in Public Tertiary Institutions in Enugu State, Nigeria, for Research Purposes

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Abstract

The study ascertained the extent of utilization of e-learning resources by business education students in public tertiary institutions in Enugu State for research purposes. One research question was posed and two hypotheses tested. A total of 1407 business education students in four public tertiary institutions in Enugu State made up the population of the study, out of which 312 students were used as sample. The research instrument was a structured questionnaire titled “The Extent of Utilization of E-Learning Resources by Business Education Students” (EUERBES). Three experts validated the instrument and a reliability test using Cronbach alpha method yielded a correlation coefficient of 0.76. Mean rating was used to answer the research question while z-test was used to test the hypotheses at 0.05 level of significance. The findings of the study revealed among others that business education students in public tertiary institutions utilized e-learning resources for research purposes to a high extent. To encourage the utilization of e-learning by business education students, it was recommended, among others, that the administrators of public tertiary institutions in Enugu State should provide e-learning resources to facilitate qualitative research among students.
Introduction

The changes in education have led to a paradigm shift from teacher centeredness to learner centeredness. This implies that the teacher can no longer decide what should be learned, instead the learner’s interest determines what and how students should learn. This situation has given rise to electronic learning (e-learning). Electronic learning exploits interactive technologies and communication systems to improve learning experiences. It has the potential to transform the way teaching and learning take place across the board.

E-learning is a term that is used to refer to all information and communication technologies (ICTs), networks, internet and other forms of electronic media that can be used to enhance teaching and learning so as to transfer knowledge and skills (Kassa & Balunywa, 2013). The integration of ICT in education has revolutionized and transformed the education sector worldwide and created positive impacts in teaching and learning (Intel, 2012). E-learning resources take various forms. For instance, it can be web-based, computer-based, virtual classrooms and content delivery via e-networks, audio or video tape, satellite TV, video conferencing, CD-ROM, i-pods, e-mails, wireless and mobile technology among others (Eke, 2011). The growth in internet characterized by the decreasing costs and increasing bandwidth has facilitated the expansion and increased use of e-learning to offer formal as well as informal educational opportunities that were previously not possible to hundreds of learners (Bonk, Lee & Reynolds, 2009).

The recent advancement in technological discoveries has made the world a global village. New technologies are invented today that would have never been thought of some years ago. Globalization and technological change have created a new global economy powered by technology, improved by information and driven by knowledge. The drive for more information within the shortest period of time has led to the development of modern technologies. Examples include the advent of the computer in the 1950s and the internet in the 1990s, which paved the way for the current revolution in information and communication technology.

The integration of e-learning in teaching and learning activities of tertiary institutions is witnessing rapid growth in developed countries. Most tertiary institutions in developed countries have websites from which students can take online lectures and participate in other educational activities. Omo-Ettu in Okereke (2005) reported that in developed countries, electronic mail, real time text conferencing, peer tutorials, and online tutorials have been used in the teaching and learning process for several years.

In Nigeria, the integration of e-learning in tertiary institutions has witnessed slow growth which may be as a result of mass unawareness. Manir (2011) noted that awareness of ICT in Nigeria started gathering momentum two decades ago. The early exposure came through lecturers, researchers, academics and students who studied abroad and had opportunities of attending conferences on ICT.

The utilization of e-learning by business education students is pivoted by their level of computer literacy. Computer literacy has to do with the degree of proficiency of students in basic
computer-oriented operations. Olusegun, Oluwafemi and Sushil (2006) noted that the utilization of e-learning resources is affected by the level of computer literacy of the students. This is because when students are knowledgeable in the usage of e-learning resources, they can confidently carry out their research work.

Research is a systematic enquiry to describe, explain, predict and control the observed phenomenon. Business education students can use e-learning resources to embark on a research project or investigation, as the case may be.

Utilization of electronic learning among university students most especially business education students, would determine to a great extent, if Nigeria could have more independent learners, who are problem solvers and who can contribute positively in improving the way things are done in Nigeria and other nations of the world. Today, students have cell-phones and other digital technologies that are internet enabled, and many have access to the internet-enabled computers. Prensky (2001) found that young people of the digital native generation possess sophisticated knowledge of and skills with information technologies.

Whether Nigerian students use these resources, knowledge and skills for e-learning is yet to be empirically ascertained. However, most of the studies on the status of electronic learning in universities were confined to developed countries like the United States of America, Britain and Australia with very few studies in developing countries like Nigeria (Molia, 2010; Yasemin & Gülbahar, 2013; Zheng, Flygare & Dahl, 2009).

Gender can be an influencing factor to the utilization of e-learning by business education teachers and students. Summer in Agboola (2006) suggested that male students experience less anxiety about ICT and make more frequent use of it. The type of institution could influence the success of e-learning integration. Wagner, Hassanein and Head (2008) pointed out success in the utilization of e-learning is influenced by the stakeholders in the educational institutions, such as students, instructors, content providers, technology providers, accreditation bodies and employees. The authors also noted that budgetary factors in a country could make the procurement of e-learning resources by institutions difficult or easy, as the case may be.

The modern trends in business which include the digitalization of business operations, e-banking, e-commerce, Management Information Systems (MIS) among others, form the basis for encouraging the use of e-learning in today’s business education training programme. Students who undergo the business education programme should therefore be able to utilize e-learning resources in education for research purposes. As the move towards e-learning in higher education continues to grow, the more important it becomes to examine the utilization of electronic learning among business education students in Enugu State public tertiary institutions. This drive to find out how business education students in Enugu State public tertiary institutions utilize e-learning resources, necessitated this research.

**Statement of the Problem**

Though the importance of e-learning is enormous, it seems that its utilization in instruction and learning in Nigerian tertiary institutions is rather unknown. This is so, because, research in the area of using e-learning resources for research purposes is scanty.
Furthermore, there appears to be lack of computer culture among business education students in public tertiary institutions which, according to Manir (2011), tends to impede the rapid diffusion of the new technologies. There is also the seeming issue of lack of computer technology literacy among students. When students are not computer literate, they would find it difficult to adapt to the use of e-learning resources in education.

**Purpose of the Study**
The major purpose of this study was to determine the extent of utilization of e-learning resources by business education students in public tertiary institutions in Enugu State. Specifically, the study determined the extent business education students in Enugu State public tertiary institutions utilized e-learning resources for research purposes.

**Research Question:** To what extent do business education students in Enugu State public tertiary institutions utilize e-learning resources for research purposes?

**Hypotheses**
The following null hypotheses were tested at 0.05 level of significance.

1. Gender has no significant influence on the mean responses of business education students in public tertiary institutions in Enugu State on their extent of utilization of e-learning resources for research purposes.

2. There is no significant difference in the mean responses of business education students from universities and colleges of education in Enugu State on their extent of utilization of e-learning resources for research purposes.

**Method**
The study adopted descriptive survey design. The study was carried out in Enugu State which is located in the South Eastern part of Nigeria. The population for this study consisted of all the 1407 business education students in the four tertiary institutions offering business education in Enugu State. The institutions are, University of Nigeria, Nsukka; Enugu State University of Science and Technology, Agbani; Enugu State College of Education (Technical), Enugu and Federal College of Education, Eha-Amufu. The sample size for the study was 312 obtained using the Taro Yamane formula. Consequently, business education students were selected using proportionate stratified random sampling technique. The data for this study were collected through the use of a structured questionnaire developed by the researcher from the review of related literature. The instrument for data collection was subjected to face validation by three experts. Cronbach alpha was used to obtain the reliability coefficients of 0.76. The data collected were analyzed using mean ratings and standard deviation for the research questions and z-test for the hypotheses. The data were analyzed using SPSS Version 20. The decision rule was to accept the null hypothesis where the calculated p-value is greater than or equal to 0.05 level of significant. The null hypothesis was rejected where the calculated p-value is less than the alpha level.

**Results**

**Research Question 1:** To what extent do business education students in Enugu State public
tertiary institutions utilize e-learning resources for research purposes?

**Table 1:** Mean responses on the extent business education students in Enugu State public tertiary institutions utilize e-learning resources for research purposes

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I use my laptops and smart phones in carrying out research work</td>
<td>4.51</td>
<td>.92</td>
<td>Very High Extent</td>
</tr>
<tr>
<td>2</td>
<td>I use internet facilities to enhance my research skills</td>
<td>4.33</td>
<td>.98</td>
<td>High Extent</td>
</tr>
<tr>
<td>3</td>
<td>E-mail facilities help me in my research work</td>
<td>3.78</td>
<td>1.02</td>
<td>High Extent</td>
</tr>
<tr>
<td>4</td>
<td>I access online libraries for educational research materials</td>
<td>3.46</td>
<td>1.15</td>
<td>Moderate Extent</td>
</tr>
<tr>
<td>5</td>
<td>I use e-journals and e-books for my research work</td>
<td>3.19</td>
<td>1.22</td>
<td>Moderate Extent</td>
</tr>
<tr>
<td>6</td>
<td>I use web services in my research work</td>
<td>3.52</td>
<td>1.15</td>
<td>High Extent</td>
</tr>
<tr>
<td>7</td>
<td>I utilize Wikis in my research work</td>
<td>2.79</td>
<td>1.05</td>
<td>Moderate Extent</td>
</tr>
<tr>
<td>8</td>
<td>I use Blogs in my research work</td>
<td>2.98</td>
<td>1.28</td>
<td>Moderate Extent</td>
</tr>
<tr>
<td>9</td>
<td>Educational websites help to improve my research skills</td>
<td>3.75</td>
<td>1.12</td>
<td>High Extent</td>
</tr>
</tbody>
</table>

Cluster mean: 3.59 High Extent

Data in Table 1 indicate that out of nine items on the extent of utilization of e-learning resources for research purposes, the respondents rated one item very high extent, four items high extent and the other remaining four items moderate extent. The cluster mean score of 3.59 indicates that on the whole, business education students in Enugu State rated utilization of e-learning resources for research purposes to a high extent. The standard deviations showed homogeneity of their responses. Similarly, the students’ responses were not scattered.

**Test of Hypotheses**

The two null hypotheses formulated were tested at 0.05 level of significance.

**Hypothesis 1**

**Table 2:** The z-test summary of the difference between the mean ratings of business education students on their extent of utilization of e-learning resources as a result of gender for research purposes.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>P-val</th>
<th>α</th>
<th>df</th>
<th>z-crit</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>121</td>
<td>31.62</td>
<td>5.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>173</td>
<td>32.80</td>
<td>5.42</td>
<td>.073</td>
<td>0.05</td>
<td>292</td>
<td>1.960</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

The z-test in Table 2 shows that there is no significant difference regarding the mean
responses of business education students in public tertiary institution in Enugu State on their extent of utilization of e-learning resources for research purposes as a result of gender with mean scores of 31.62 and 32.80 for males and females respectively. This is shown by the p-value of 0.073 which is greater than 0.05 level of significance at 292 degrees of freedom. The null hypothesis of no significant difference between the two groups is therefore, upheld.

**Hypothesis 2**

Table 3: The z-test summary of the difference between the mean ratings of business education students on their extent of utilization of e-learning resources as a result of type of institution for research purposes.

<table>
<thead>
<tr>
<th>Institution type</th>
<th>N</th>
<th>( \bar{X} )</th>
<th>SD</th>
<th>P-val</th>
<th>df</th>
<th>z-crit</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>140</td>
<td>32.52</td>
<td>5.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colleges of Education</td>
<td>15</td>
<td>32.12</td>
<td>5.21</td>
<td>0.534</td>
<td>292</td>
<td>1.960</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

Business education students in universities in Enugu State, as shown in Table 3, recorded a mean score of 32.52 on their extent of utilization of e-learning for research purposes while those in colleges of education recorded a mean score of 32.12. The p-value is 0.534 which is greater than 0.05 alpha level at 292 degrees of freedom. The null hypothesis is therefore retained meaning that there is no significant difference in the mean ratings of business education students in universities and their counterparts in colleges of education in Enugu State on their extent of utilization of e-learning resources for research purposes.

**Discussion of the Findings**

The study revealed that business education students highly utilized e-learning resources for research purposes. This finding partly contradicts the findings of Ajadi et.al. (2008) who argued that there is gross underutilization of e-learning resources in Nigerian tertiary institutions. Students highly utilized some e-learning facilities while some others moderately utilized them for research purposes.

The findings also showed that students often visited the internet for educational purposes that will assist them with their research works. This aligns with the submission of Bupo and Ndinechi (2015) that students were competent in computer usage and they often utilized e-learning facilities in searching for educational materials, checking results online and processing assignments.

However, students moderately utilized some e-learning resources. These include reading e-books and e-journals, using online libraries, utilization of Wikis and Blogs for research
purposes. These e-learning resources appear not to be commonly utilized in Nigerian tertiary institutions because of the attending challenges accompanying its usage. As pointed out by Kinley (2010), the problems of e-learning resource utilization ranged from slow internet connection to poor electricity power supply. It is therefore clear that the utilization of e-learning in Nigerian tertiary institutions is still in its infancy stage as argued by Eke (2011).

The test of the hypotheses revealed that there was no significant difference in the mean responses of business education students in Enugu State tertiary institutions on their extent of utilization of e-learning resources for research purposes as a result of gender. These results show that male business education students in public tertiary institution do not significantly differ from the female students on their extent of utilization of e-learning resources for research purposes. This result corroborates the findings of Olutunji (2011) who noted that the usage of e-learning resources is not influenced by gender. This current study showed that both male and female business education students in tertiary institution in Enugu State did not significantly differ on their extent of utilization of e-learning for research purposes.

The test of the hypotheses also revealed that there was no significant difference in the mean responses of business education students in universities in Enugu State and their counterparts in colleges of education on their extent of utilization of e-learning resources for research purposes. This means that business education students in public universities in Enugu State do not differ on their extent of utilization of e-learning resources. As a result, institution type does not significantly determine the level of utilization of e-learning resources by business education students. This finding is in line with the findings of Abiodoye, Adelokun and Fakokunde (2014) that there is no significant difference between university and undergraduate students of Adeyemi College of Education, Ondo in the level of utilization of electronic learning resources for research purposes. In line with this, the result of this study showed that business education students in the public universities in Enugu State do not differ significantly from their counterparts in colleges of education.

Conclusion

Based on the findings of the study, it is concluded that business education students in public tertiary institutions in Enugu State utilized e-learning resources for research purposes. Similarly, students can access the internet and other e-learning resources through their mobile phones, personal laptops, digital libraries and computer studios provided by the institutions.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. Since business education students utilise e-learning for research purposes, management of public tertiary institutions should provide e-learning resources in their institutions to enable the students access and utilize them better.

2. Lecturers should provide enabling environment in the classroom to encourage class discussions with the use of e-learning resources.

3. Business educators should give students class assignments to be done and submitted through any of the e-learning platforms such as emails.
References


