



INTEGRATION OF NEW TECHNOLOGIES IN TEACHING BUSINESS EDUCATION COURSES IN UNIVERSITIES IN THE E-WORLD

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Abstract

This study was carried out in public universities in Enugu State to determine the ratings of business educators 'on the factors constraining integration of new technologies in teaching business education courses in the e-world. The researchers utilized survey research design. The population comprised 20 business educators in the two public universities offering business education programme in Enugu State. Two research questions were answered by the study while two null hypotheses were tested at 0.05 level of significance. The instrument used for data collection was a structured questionnaire developed by the researchers. The instrument was validated by experts from the Faculty of Education, Enugu State Universities of Science and Technology. Mean and standard deviation were used to answer the research questions while t-test was used to test the hypotheses. The results obtained from the study revealed that non availability of new technology tools and lack of competencies on the part of business educators constrain integration of new technologies in teaching business education to a high extent. Based on the findings of the study, the researchers recommended that business educators should up-grade their skills/competencies on how to integrate new technologies in teaching and also the three arms of the Government should consider funding of business education programme in Universities a top priority considering the roles it plays in national development.

Key words: *Business education, constraining factors, integration and new technologies*

Introduction

From the trend and advancement in technology, the world is tending towards E-world. E-world simply means an electronic world and it is synonyms with digitalized or automated world. E-world is a world that makes significant use of computer technology in every sectors of the economy notably in education industry.

Osuala (2004) opined that online study programs and virtual universities are already real nowadays and that new forms of communication are gaining importance in education. Also, Osuala noted that online programs offer new approaches to learning and make knowledge more accessible. In other words, these new forms of communication are gaining accesses to the classroom and have changed the way teaching and learning takes place. Days



are gone when teaching and learning were confined to the four walls of the classroom. Advancement in computer technology brought about new technologies. Also, advances in new technologies will rapidly take off with new directions on how students learn and teachers teach.

Wole in Owenbiugie and Ojawale (2014) opined that new technology are seen as the scientific methods of utilizing modern equipment for the accomplishment of teaching goals and objectives. In the opinion of Nwokike (2015), new technologies imply new innovations and applications of concepts, principles and processes for the improvement of human life. New technologies have great potentials to enhance teaching and learning. According to Onojotah (2014), new technologies are beneficial in business education curriculum contents because they can be presented simultaneously online to students in immediate locations. Norman (2016) reported that proper technology integration guides students towards greater understanding of all concepts of integrating technology in Education. Norman identified the following benefits of integrating technology in education: technology makes teaching easy, technology helps to track student's progress, technology help students to enjoy learning, makes distance learning more accessible than ever, students and teacher can access information at anytime and makes collaboration more effective.

New technologies are used to facilitate and support teaching/learning, incorporate a variety of learning strategies and technologies (Nwokike, 2015). New technologies consist of computers, internet facilities, slide projectors, interactive white board, electronic board, overhead projectors, scanners, multi-media computer and projectors, CD roms and video diskette. New technologies are potential tool in teaching/learning business education in Universities if properly integrated in teaching/learning process. Integrating new technologies into teaching and learning entails making new technologies to become part and parcel of teaching and learning of business education in public tertiary universities in Enugu State. Integrating new technologies into teaching/learning of business education courses means utilizing new technologies in teaching by business Educators in Universities in Enugu State. A business educator who fails to utilize new technologies in teaching cannot boast of producing a competent graduate/global worker in the electronic world. Advancement in new technologies in the electronic world will rapidly take off with new directions on how teachers teach and how students learn. Teaching and learning in business education is taking a new dimension in the electronic world. This is in agreement with Danica (2016) who opined that the world is rapidly changing and it is affecting the landscape of business education.

Business education is an academic programs offered in colleges of Education and Universities in Enugu State. In the view of Nwokike, Ezeabii and Jim (2018), business education is concerned with teaching the skills, attitudes and knowledge necessary for a successful career in office and business world. The authors identified the following objective of business education among others that business education enables the students to gain experience with skills such as leadership and communication and also provide students with information about all aspects of business. Business education is a discipline that is meant to



prepare individuals economically, politically, socially and technologically in transforming human resources and enhancing economic empowerment.

Business Educators must face the challenges associated with new technologies in the E-world. A business educator is a teacher who has the requisite certificate in business education obtained from an accredited University or colleges of education. In other words, a business educator is a professionally trained teacher of business education. In order to advance teaching and learning in the E-world and make the programme relevant, business educators must upgrade their skills in the utilizations of new technologies such as computers, interactive white board, overhead projectors, social media, CD rams, internet facilities, printers and scanners etc.

The foregoing presupposes that any institution offering business education programme need to have the relevant new technology tools in teaching in order to impart the necessary skills/competencies and prepare the students for digital age or electronic world. Amalie and Ogben (2014) asserted that business education programme must have infrastructural materials and technological gadget necessary for the impartation of the much needed skills, competencies, knowledge, aptitudes and values to the recipient.

Every employer of labour nowadays is looking for set of skills on the employees and one of such sets of skills is the technology skills. Nwokike (2015) identified computer operations, data base, accounting software and spread sheet as examples of technology skills. This tallied with the assertion made by Turner (2005) cited by Nwokike (2015) that all educators should possess word processing, spread sheet, database, electronic presentation, web navigation, website design and e-mail management skills etc.

Unfortunately, many business educators were trained with old technology. This poses a challenge to business educators at all levels of education. As computer and associated technologies continue to evolve, business educators must continue to strive for excellence in their work by upgrading their skills and imparting the required technological skills to their students.

It has been noted with dismay that many business educators are resistant to technological changes. The above assertion supports the finding of Ukor, Agwazie & Ayemherire, (2014) that business educators almost never utilize modern e-learning tools in their teaching and learning encounters with their students. Nwokike & Eya (2015) in their study revealed that accounting educators require the technological skills for effective job performance in automated offices. Lack of these technological skills and non availability of new technology tools could be a constraint or factor constraining integration of new technology in teaching business education in Universities in the e-world.

A constraint is a factor that limits or holds back the possible success of a plan. Contextually, a constraint is a limiting factor hindering business educator's from fully utilizing new technology tools in teaching. For business education programme in universities in Enugu State which is one of the six geopolitical zones in Nigeria to be



effective in an e-world, the identified constraining factors need to be surpassed. It is against this backdrop that the researchers seek to carry out an in-depth study on the extent such factors constraining integration of new technologies as rated by business educators in public universities in Enugu State in teaching business education courses in the E-World.

Statement of the Problem

The world is gradually turning to an electronic world. The modern office of the recent time where business education graduates are going to work is highly digitalized or automated. Research findings such as Nwokike (2015), Hart, Emeli & Okorogba (2016) revealed that ICT tools/facilities are not available in schools and also Ezenwafor and Ementa (2016) found that lack of competencies constrain adoption of e-learning to high extent in teaching business education in tertiary institution in Anambra State. This could equally be the same in Enugu State. The extent to which non availability of new technology tools and lack of competencies on the part of business educators constrain integration of new technologies in teaching business education courses is yet to be established, hence the problem of this study.

Research Questions

The following research questions were answered the study:

1. To what extent does non- availability of new technology tools constrain integration of new technologies in teaching business education courses in the e-world?
2. To what extent does lack of technological skills constrain integration of new technologies in teaching business education courses in the e-world?

Null Hypotheses

The following Null hypotheses were tested at 0.05 level of significance.

- Ho₁: There is no significant difference between the mean ratings of business educators in Federal and State Universities on the extent non availability of new technology tool constrain integration of new technologies in teaching business education courses in the e-world.
- Ho₂: Significant difference does not exist between the mean ratings of business educators in Federal and State Universities on the extent lack of technological skills constrain integration of new technologies in teaching business education course in the e-world.

Method

The study adopted descriptive survey research design. According to Uzoagulu (2011), descriptive survey can be used for a study that uses questionnaire to seek the opinion of a given population or sample. The study was carried out in the two public Universities (University of Nigeria Nsukka and Enugu State University of Science and Technology)



offering business education programme. The population comprised twenty (20) business educators teaching in the study area. Instrument used for data collection was structured questionnaire developed by the researchers and carefully validated by three experts from the Faculty of Education, Enugu State University of Science and technology. The instrument has two parts, part I and Part II. Part I was designed to elicit information on the bio-data of the respondent using such variable as institutional ownership (Federal and State) while part II has two sections. Section A has 11 items while section B has 13 items. The instrument was administered by the researchers themselves in their various institutions. The data collected were analyzed using mean and standard deviation while t-test was used to test the hypotheses at 0.05 level of significance. For decision to be reached regarding the mean, the upper and lower class limits of the mean were adopted. Very high extent (VHE) 3.50-4.00 High extent (HE) 2.50-3.49, Low extent (LE) 1.50-2.49 and Very Low extent (VLE) 1.00-1.49 The null hypotheses was rejected if the t-calculated value was more than the critical or t-table value but when the t-calculated was less than the critical t-table, the null hypothesis was not rejected.

Results

Research Question One

To what extent does non availability of new technology tools constrain integration of new technology in teaching business education the e-world?

Table I: Mean ratings of business educators on the extent non availability of new technology tools constrain integration of new technologies in teaching business education courses in the E-world.

S/N	Extent non availability of technology tools constrain integration of new technologies	Federal N=25		State N = 5		Overall		Decision
		\bar{x}_2	SD ₂	\bar{x}_2	SD ₂	\bar{x}_G	SD _G	
1.	Computers(Desktop/laptop	3.47	0.74	3.00	0.40	3.35	0.67	HE
2.	Internet facilities	3.73	0.59	3.20	0.45	3.60	0.60	VHE
3.	Slide projectors	3.60	0.91	3.80	0.45	3.65	0.81	VHE
4.	Interactive whiteboard	3.27	0.70	4.00	0.00	3.45	0.69	HE
5.	Electronic board	3.27	0.96	4.00	0.00	3.45	0.89	HE
6.	Overhead projector	3.53	0.64	3.20	0.45	3.45	0.60	HE
7.	Multi-media computers	3.67	0.62	3.60	0.55	3.65	0.59	VHE
8.	Scanners	3.27	0.59	3.40	0.55	3.30	0.57	HE
9.	Hardware facilities	3.40	0.63	3.20	0.45	3.35	0.59	HE
10.	Video disc	3.47	0.64	3.20	0.44	3.40	0.60	HE
11.	CD Rom	2.93	0.88	3.20	0.45	3.00	0.79	HE
Grand/cluster Mean		3.12	0.72	3.43	0.38	3.42	0.67	HE

Table 1 shows that out of 11 items on new technology tools, business educators rated three items as factors constraining integration of new technologies in teaching business



education courses to a very high extent. They are items 2,3, and 7 with a corresponding mean of 3.60, 3.65 and 3.65. The remaining eight items constrain the integration of new technologies in teaching business education courses to a high extent. They are items 1, 4,5,6,8,9,10 and 11 with corresponding group mean of 3.35, 3.45, 3.45, 3.45, 3.30, 3.35, and 3.40 and 3.00. The group mean of 3.42 shows that non availability of ICT tool constrain integration of new technology to a high extent.

Null hypothesis 1

There is no significant difference between the mean ratings of business educators in Federal and State Universities on the extent non availability of new technology tools constrain integration of new technologies in teaching business education courses in the E- world.

Table 2: Mean ratings of business educators on the extent non availability of new technology tools constrain integration of new technologies in teaching business education courses in the E- world.

Variables	N	T	Df	Sig. (2tailed)	Mean Difference	Std. Error Difference	Decision
Federal	15	0.070	18	0.945	0.20000	2.85553	NS
State	5						

Table 2 shows that the t-value at 0.05 level of significant and 18 degree of freedom for 11 the items are 0.070 with a significant value of 0.945. Since the significant value of 0.945 is more than the 0.05 level of significant, the null hypothesis is not significant. This means that there is no significant difference with the regard to the 11 items on the mean ratings of business educators in Federal and State public universities in Enugu State on the extent non availability of new technology tools constrain integration of new technologies in teaching business education courses in the E- world. Hence the null hypothesis is not significant.

Research Question Two

To what extent do lacks of technological skills constrain integration of new technologies in teaching business education courses in the e-world?

Table 3: Mean ratings of business educators on the extent lack of technological skills constrain integration of new technologies in teaching business education courses in Universities.

S/N	Extent lack of technological skills constrain integration of new Technologies	Federal N =25		State N = 5		Overall		Decision
		X ₂	SD ₂	X ₂	SD ₂	X _G	SD _G	
1.	Microsoft office word	3.33	0.90	3.00	1.00	3.25	0.91	HE
2.	Microsoft office excel	3.80	0.41	3.60	0.89	3.75	0.55	VHE
3.	Microsoft office PowerPoint	3.53	0.52	3.20	0.84	3.45	0.60	HE
4.	World wide web	2.93	0.96	3.40	0.55	3.05	0.89	HE
5.	Database software	3.33	0.89	3.40	0.55	3.35	0.81	HE
6.	E-mail management	2.93	0.88	3.60	0.56	3.10	0.85	HE
7.	Web navigation	3.00	0.85	3.40	0.54	3.10	0.79	HE
8.	On-line instruction	3.27	0.46	2.80	1.10	3.15	0.67	HE
9.	Information management	3.40	0.51	3.00	1.00	3.30	0.66	HE
10.	Computer hardware	3.07	0.70	3.40	0.57	3.15	0.67	HE
11.	Communication software	3.33	0.82	2.80	1.10	3.20	0.89	HE
12.	Intranet	3.13	0.74	3.20	0.84	3.15	0.75	HE
13.	Extranet	2.93	1.09	3.20	0.84	3.00	1.03	HE
Grand/cluster Mean		3.23	0.75	3.23	0.80	3.23	0.84	HE

The result of Table 3 shows that lacks of technological skills on the part of business educators constrain integration of new technologies in teaching business education courses to a high extent in Universities in Enugu State. The mean ranges from 0.55-1.03 and the grand mean of 3.23 attest to that. The grand standard deviation of 0.84 indicates that the respondents are very close in their ratings.

Ho₂: Significant difference does not exist in the mean ratings of business educators on the extent lack of technological skills constrain integration of new technologies in teaching business education courses in universities in Enugu State.

Table 4: Mean ratings between Business Educators in Federal and State Universities on the extent lack of technological skills constrain integration of new technologies in teaching business education courses.

Variables	N	T	Df	Sig. (2tailed)	Mean Difference	Std. Error Difference	Decision
Federal	15						
State	5	0.012	18	1.000	0.05230	2.61619	NS

The result of analysis in Table 4 shows that the t. value at 0.05 level of significance and 18 degree of freedom for 13 items is 0.012 with a significant value of 1.000. Since the significant value of 1.000 is more than the 0.05 level of significance, the null hypothesis is not significant. This implies that there is no significant difference in mean ratings between business educators in Federal and State Universities on the extent lack of technological skills constrain integration of new technologies in teaching business education courses in public universities in Enugu State. Therefore the null hypothesis is not significant.



Discussion of Findings

The result in Table I showed that non availability of new technology tools constrain integration of new technology in teaching business education courses in public Universities in Enugu State to a high extent. This finding is in line with the findings of Amiya (2014) that non availability and non functional ICT tools are some of the challenges militating against the integration of new technologies into office technology and management curriculum. The findings of the study also revealed that business educators in Federal and State Universities do not differ significantly on the extent non availability of new technology tools constrain integration of new technologies in teaching business education courses.

The findings of the study in Table 2 showed that lack of technological skills on the part of business educators constrain integration of new technologies in teaching business education courses to high extent. The findings of the study collaborates with the findings of Ezenwafor and Ementa (2016) who found that lack of competencies on the part of business educators in manipulating and using e-learning constrain adoption of e-learning to high extent in tertiary institutions in Anambra State. The study further revealed that significant difference did not exist in the mean ratings of business educators in Federal and State Universities on the extent technological skills constrain integration of new technologies in teaching business education courses in Enugu State. The finding is in agreement with the findings of Ezenwafor and Ementa (2016) that significant difference did not exist in the opinion of business educators in Universities and colleges of education regarding the extent lack of competencies constrain e-learning adopting in tertiary institutions in Anambra State.

Conclusion

From the findings of the study, it can be concluded that non availability of new technology tools and lack of technological skills on the part of business educators constrain integration of new technologies in teaching business education courses in Universities in Enugu State to a high extent.

Recommendations

Based on the findings of the study and the conclusion drawn, the researchers made the following recommendations:

1. Business educators should up-grade their skills/competencies on how to integrate new technologies in teaching
2. The three arms of the government (Federal, State and Local) should consider funding of business education programme in Universities a top priority considering the role it plays in National development.
3. The others stakeholders in Education should also contribute maximally to the funding of business education programme .



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