



APPLICATION OF NEW TECHNOLOGIES IN TEACHING BUSINESS EDUCATION COURSES AMONG STUDENTS IN TERTIARY INSTITUTIONS IN RIVERS STATE

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Abstract

The study was conducted to ascertain the application of new technologies in teaching Business Education courses in tertiary institutions in Rivers State. The study adopted a descriptive survey design. Three objectives, three research questions and two hypotheses guided the study. The total population of the study was 69 Business Education lecturers. The study adopted a census sampling technique; this was because the population of the study was of manageable size. A well structured questionnaire was used to gather data for the study. Data was analyzed using mean and standard deviation, while z-test statistics was used to test the hypothesis at 0.05 level of significance. The findings revealed that there are new technologies but they are rarely used by the lecturers in teaching Business Education courses in tertiary institutions in Rivers State; also Business Education studios and laboratories are not equipped with new technologies and finally, most business educators are not in tune with the use of new technologies. The researchers then recommended that: new technologies should be constantly used by business educators in teaching Business Education courses, Government should equip Business Education studios and laboratories to enable the lecturers teach with modern facilities amongst others.

Keywords: *Application, New Technology, Teaching, Business Education, Courses.*

Introduction

Business Education is a vocational programme with the aim of equipping students so that at the end they could acquire knowledge and skills that could enable them to be self-reliant. It is an aspect of human activity that serves productive purposes and meets with the needs of mankind in the current technology-driven world, be it educationally, socially or economically. In Nigeria, Business Education has been purported to serve as a platform for producing skilled business teachers, office



administrators and businessmen and women that can effectively compete in the world of work and in enterprises as employees, entrepreneurs and as employers. Nwagwu and Azih (2016) defined Business Education as a vocational programme that equips the recipients with skills, attitudes, knowledge and understanding needed for effective participation and contribution as producers and or consumers of business products. Business Education prepares individuals who will adequately participate in business activities and also equip individuals with business knowledge and skills. Similarly, Oliver (2011) defined Business Education as the sum total of the knowledge, skills and attitude that are required to successfully promote and administer business enterprises. This implies that Business Education is needed especially in this era of globalization and information and communication technology (ICT) driven age where organization are getting increasingly flexible, multi-tasking and performance base.

The rapid changes in Information and Communication Technology according to Nwogu, Udoeye and Oguejiofor (2014), has necessitated the need for Business Education programme to embrace e-learning in this new technological age in order to enable the graduates of the programme to fit in the modern office after graduation. Technology as defined by Mumford (2010); Akpomi and Ordu (2009) refers to entities both material and immaterial created by the application of mental and physical effort in order to achieve some value. In other words, technology could be seen as tools and machines that may be used to solve both real-world and educational problems.

Technology could also be referred to as the current state of humanity's knowledge of how to combine resources to produce desired products as well as to satisfy human wants which includes teaching methods, skills, processes, technologies, tools and raw materials. Kompridis in Amesi and Akpomi (2013) opined that the term technology can either be applied generally or to specific areas, for example, information technology, construction technology and medical technology. Technology is equally defined by Nwoju in Nedum-Ogbede (2016) as the application of the scientific method to solving problem in our daily life; although, in the area of Business Education, technology can be seen as the application of scientific method of solving problems regarding impartation of skills to students or learners in order for them to meet the challenging needs and demands of the society. Onyia and Offorma (2011) stated that successful adoption and usage of new technologies in Business Education is fundamental to the paradigmatic shift in both content and pedagogy that is at the heart of education reform in this 21st century. According to Ezenwafor (2012), the following new technologies will aid the teaching and learning of Business Education subjects:



Opaque projector
Multi-media projector
Broadcast materials or CD ROM
Micro-computers with software applications
Skillful keyboard
Emailing and messaging
Internet browsing using search engine
Windows, messenger, yahoo, chat room
E-banking
Computer software applications such as word processors, desktop publishers, graphics, power- point, spreadsheet.
Smart board
Mimeo boards
Teleconferencing
Video conferencing
E-book reader
Streaming videos

For tertiary institutions in Rivers State that offer Business Education programme (Rivers State University and Ignatius Ajuru University of Education) to deliver on their mandates, the quality of the training given to students should be such that can give adequate skills and information needed in the labor market, therefore, for Business Education to serve the purpose of providing the needs of the learners and the society, continuous improvement in the implementation of new technologies by the institutions offering the course in order to ensure that the quality of education is in tandem with societal demands is required.

Statement of the Problem

One of the main aim of Business Education is to produce graduates that are equipped with vocational skills and competencies required in modern offices and schools, but the relevance of Business Education in classrooms and laboratories in this regard is questionable. Nagel in Madu, Obidi and Genevive (2015) noted that irrespective of increasing widespread adoption of technologies in almost every aspect of education, significant challenges are preventing widespread affective implementation. According to Nagel, one of the challenges confronting business educators usage of new technologies is lack of sustainable professional development for business educators who are required to integrate the new technologies into classroom practices. Studies have revealed that the use of new technologies have not permeated



to a great extent in many tertiary institutions in Nigeria due to extant socio-economic and technological challenges (Sife, Lwoga and Sanya 2007). In the same vein, Amoor in Irike, Iyalla and Okereke (2017) opined that Business Education graduates find it difficult to use new technologies in a work environment due to their inadequate exposure to new technologies and other rudiments of managing modern offices. This could be attributed to student's inability to use new technologies when they were in higher institutions as undergraduates. In agreement with the above statements, Achinike (2012) posited that Business Education studios and laboratories ought to be enhanced to equip students with relevant information communication technology skills expected of its learners as according to Arekete, Ifinedo and Akinnuwesi in Isiyaku, Ayub and Abdulkadir (2015) the failure of new technology adoption in education and Business Education in particular has become an issue of great concern in Rivers State and Nigeria at large. In view of these, one would ask, are there new technologies for teaching Business Education courses? If the answer is yes, are they been used by Business Education lecturers in teaching Business Education courses? These questions amongst others warranted a study of this nature.

Research Questions

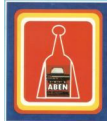
The following research questions were posed for the study:

- What are the new technologies used in teaching Business Education courses among students in tertiary institutions in Rivers State?
- How are the new technologies used by teachers in teaching Business Education courses among students in tertiary institutions in Rivers State?
- What are the challenges to the effective usage of new technologies in teaching Business Education courses among students in tertiary institutions in Rivers State?

Hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance:

- There is no significant difference in the mean responses of Rivers State University lecturers and Ignatius Ajuru University of Education lecturers on the new technologies used in teaching Business Education courses among students in tertiary institutions in Rivers State.
- There is no significant difference in the mean responses of Rivers State University lecturers and Ignatius Ajuru University of Education lecturers on the usage of new technologies by lecturers in teaching Business Education courses among students in tertiary institutions in Rivers State.



Methods

The study was carried out in tertiary institutions in Rivers State offering Business Education at degree levels. (Rivers State University and Ignatius Ajuru University of Education). The study adopted a descriptive survey design. The population of the study was a total of 69 Business Education lecturers comprising RSU 12 and IAUE. The study adopted a census sampling technique because the population was of manageable size. The instrument for data collection was a structured questionnaire titled “Application of New Technologies in Teaching Business Education Courses in Tertiary Institutions in Rivers State”. The questionnaire was partitioned into two sections. Section A was for demographic information while section B was to elicit information from the respondents regarding the questions posed and structured in the pattern of four point rating scale of Strongly Agreed (4), Agreed (3), Disagreed (2), and Strongly Disagreed (1). The instrument was face and content validated by three experts. The reliability of the instrument was established using Person Product Moment Correlation method. The reliability coefficient (r) achieved was 0.82. Mean and standard deviation were used to answer the research questions while z-test was used to test the hypotheses at 0.05 level of significance with a criterion mean of 2.50 and above as accepted or 2.49 below as rejected. Also, the decision rule for the hypotheses was that any hypotheses with z-calculated value less than the z-critical value of 2.00 was accepted and if greater than the z-critical value it was rejected. The 00 z-test table according to Obodoeze (1996) was for 0.05 level of significance.

Results

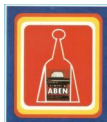
The results are presented as follows:

Research Question 1

What are the new technologies used in teaching Business Education courses in tertiary institutions in Rivers State?

Table 1: Mean Responses of Rivers State University Lecturers and Ignatius Ajuru University of Education Lecturers on the New Technology Used in Teaching Business Education Courses in Tertiary Institutions in Rivers State

S/N	The following are the new technologies used in teaching Business Education courses	RSU			IAUE		
		X	SD	Remark	X	SD	Remark
1	Smart board	3.61	0.75	Agreed	3.53	0.62	Agreed
2	Mimeo boards	3.59	0.81	Agreed	3.49	0.84	Agreed
3	Teleconferencing	3.54	0.85	Agreed	3.50	0.67	Agreed
4	Video conferencing	3.65	0.76	Agreed	3.54	0.76	Agreed
5	E-book reader	3.67	0.74	Agreed	3.56	0.79	Agreed
6	Streaming videos	3.73	0.85	Agreed	2.88	0.63	Agreed



7	Opaque projector	2.91	1.07	Agreed	3.13	0.81	Agreed
8	Skilful keyboard	3.32	0.71	Agreed	3.23	0.65	Agreed
9	Emailing and messaging	2.84	1.01	Agreed	2.94	1.10	Agreed
10	Internet browsing using search engine	2.92	1.09	Agreed	2.97	1.02	Agreed
11	E-banking	2.95	1.66	Agreed	2.93	1.09	Agreed
12	Multi-media projector	3.53	0.62	Agreed	3.07	1.03	Agreed
13	Broadcast material or CD ROM	3.02	1.05	Agreed	2.99	0.98	Agreed
14	Microsoft computers with software applications	2.82	0.95	Agreed	2.74	1.11	Agreed
Grand Mean		3.29	0.92	Agreed	3.17	0.86	Agreed

Source: Field Survey, 2019

Table 1 shows the grand mean scores of 3.29 and 3.17 for RSU and IAUE lecturers on the new technologies used in teaching Business Education courses in tertiary institutions in Rivers State and standard deviation of 0.92 and 0.86 respectively. Based on the 14 items listed, the respondents agreed that all the items listed were new technologies used in teaching Business Education courses in tertiary institutions in Rivers State.

Research Question 2

How are the new technologies used by lecturers in teaching Business Education courses in tertiary institutions in Rivers State?

Table 2: Mean Responses of Rivers State University Lecturers and Ignatius Ajuru University of Education Lecturers on How the New Technologies are Used by Lecturers in Teaching Business Education Courses in Tertiary Institutions in Rivers State.

S/N	The following are the new technologies used in teaching Business Education courses	RSU			IAUE		
		X	SD	Remark	X	SD	Remark
15	Smart board	2.00	0.49	Reject	2.10	0.25	Reject
16	Mimeo boards	1.80	0.85	Reject	2.40	0.04	Reject
17	Teleconferencing	1.50	0.95	Reject	1.25	1.06	Reject
18	Video conferencing	2.46	1.13	Reject	2.05	0.76	Reject
19	E-book reader	2.49	1.06	Reject	2.49	1.08	Reject
20	Streaming videos	2.47	1.03	Reject	2.43	0.98	Reject
21	Opaque projector	2.45	0.61	Reject	2.23	0.94	Reject
22	Skillful keyboard	2.31	1.05	Reject	2.02	1.08	Reject
23	Emailing and messaging	2.25	1.04	Reject	2.23	1.02	Reject
24	Internet browsing using search engine	2.19	1.12	Reject	1.99	0.95	Reject
25	E-banking	2.00	0.52	Reject	1.50	0.95	Reject
Grand Mean		2.17	0.89	Reject	2.06	0.82	Reject

Source: Field Survey, 2019

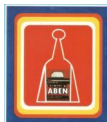


Table 2 reveals the grand mean scores of 2.17 and 2.06 for RSU and IAUE lecturers on the new technologies been used by lecturers in teaching Business Education courses in tertiary institutions in Rivers State and standard deviation of 0.89 and 0.82 respectively. From the findings, all the respondents disagreed that the items listed above are being used by lecturers in teaching Business Education courses in tertiary institutions in Rivers State.

Research Question 3

What are the challenges to the effective usage of new technologies in the teaching of Business Education courses in tertiary institutions in Rivers State.

Table 3: Mean Responses of Rivers State University Lecturers and Ignatius Ajuru University of Education Lecturers on the Challenges to the Effective Usage of New Technologies in the Teaching of Business Education Courses in Tertiary Institutions in Rivers State.

S/N	The following are the challenges to the effective usage of new technologies in teaching Business Education courses	RSU			IAUE		
		X	SD	Remark	X	SD	Remark
26	Lack of space	3.53	0.62	Accept	3.49	0.84	Accept
27	Unavailability of power supply	3.61	0.75	Accept	3.59	0.81	Accept
28	Dearth of machine/equipment	2.88	0.63	Accept	3.63	0.59	Accept
29	Lack of maintenance	3.07	1.03	Accept	2.98	1.02	Accept
30	Inadequate training opportunities for business educators	3.24	0.96	Accept	2.92	1.07	Accept
31	Inability of business educators to utilize available devices	2.74	1.11	Accept	3.05	0.95	Accept
32	Lack of professional development for business educators	3.23	0.84	Accept	3.31	0.87	Accept
Grand Mean		3.18	0.84	Accept	3.28	0.87	Accept

Source: Field Survey, 2019

In Table 3, the grand mean scores of RSU and IAUE lecturers were 3.18 and 3.28 with a standard deviation of 0.84 and 0.87 respectively. Based on the 7 items listed, the respondents agreed that lack of space, unavailability of power supply, lack of maintenance amongst others were some of the challenges to the effective usage of new technologies in the teaching of Business Education courses in tertiary institutions in Rivers State.

Hypotheses

The hypotheses for the study were tested according to each hypothesis formulated as thus:

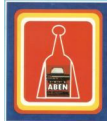


Table 4: Z-test of Difference Between RSU Lecturers and IAUE Lecturers on the New Technologies Used in Teaching Business Education Courses in Tertiary Institutions in Rivers State.

Group	N	SD	NDF	Std	Z-cal	error	Decision	
RSU Lecturers	3.28	0.92	12	67	0.28	0.43	2.00	Significant (Accepted)
IAUE Lecturers	3.17	0.86	57					

Source: Field Survey, 2019.

Table 3 revealed that there is no significant difference in the mean responses between RSU Lecturers and IAUE Lecturers on the new technologies used in teaching Business Education courses among students in tertiary institutions on Rivers State. the calculated z-value of 0.18 is less than the z-critical of 1.67 at 0.05 level of significance leading to the acceptance of the hypothesis.

Table 5: Z-test of Difference Between RSU Lecturers and IAUE Lecturers on the Usage of New Technologies by Lecturers in Teaching Business Education Courses in Tertiary Institutions in Rivers State.

Group	N	SD	NDF	Std	Z-cal	error	Decision	
RSU Lecturers	2.17	0.89	12	67	0.26	0.61	2.00	Significant (Accepted)
IAUE Lecturers	2.06	0.82	57					

Source: Field Survey, 2019.

Table 4 reveals that there is no significant difference in the mean responses between RSU lecturers and IAUE lecturers on the usage of new technologies by lecturers in teaching Business Education courses among students in tertiary institutions in Rivers State. The calculated Z value of 1.86 is less than the Z critical of 1.96 at 0.05 level of significance leading to the acceptance of the hypothesis.

Discussion of Findings

Based on the result obtained in research question one, it was revealed that there were new technologies in teaching Business Education courses in tertiary institutions in Rivers State. the findings is in agreement with Ezenwafor (2012) who in his study titled “ Adequacy of exposure to information and communication technology by graduating Business Education students of tertiary institutions in Anambra State” listed opaque projector, skillful keyboard, emailing and messaging amongst others as new technologies for teaching Business Education courses. The researcher in agreeing with Ezenwafor asserted that new technologies will improve teaching and



learning in our tertiary institutions. Results on hypothesis one indicates that there is no significant difference in the mean responses between RSU lecturers and IAUE lecturers on the new technologies used in teaching Business Education courses among students in tertiary institutions.

The findings in research question two revealed that the new technologies are not been used by lecturers in teaching Business Education courses in tertiary institutions in Rivers State. the findings aligns with that of Sife, Lwoga and Sanya (2007) who reported that studies revealed that the new technologies have not permeated to a great extent in many tertiary institutions in Nigeria due to extant socio-economic and technological challenges. In line with that, Offorma (2011) stated that the successful adoption and usage of new technologies in Business Education is fundamental to the paradigmatic shift in both content and pedagogy that is at the heart of education reform in this 21st century. Agreeing with Sife, Lwonga and Sanya, and Offorma, the researchers viewed that the usage of new technologies by lecturers will no doubt boost teaching and learning in this 21st century as well as motivate students to be technology-driven.

The findings in research question 3 revealed that there were challenges to the effective usage of new technologies in the teaching of Business Education courses in tertiary institutions in Rivers State. The findings is in agreement with that of Amoor in Orike, Iyalla and Okereke (2017) who noted that Business Education graduates find it difficult to use new technologies in a work environment due to their inadequate exposure to new technologies and other rudiments of managing modern offices. In agreement with Amoor in Orike, Iyalla and Okereke, Achilike (2012) posited that Business Education studios and laboratories should be enhanced to equip students with relevant information communication technology skills expected of its learners. Agreeing with Amoor in Orike, Iyalla and Okereke, and Achilike, the researchers viewed that provision and maintenance of equipments, ability of business educators to utilize available devices and professional development of business educators will improve the effective usage of new technologies in teaching Business Education courses in tertiary institutions in Rivers State.

Conclusion

From the findings, it was deduced that: there are new technologies but they are rarely used in teaching Business Education courses in tertiary institutions in Rivers State. Business Education studios and laboratories are not equipped with new technologies, finally, most business educators are not in tune with the use of new



technologies. The implications gathered from the study was that new technologies found in teaching Business Education courses need to be adequately improved and effectively utilized for the teaching of Business Education courses; also, lecturers need to be exposed to new technologies for adequate teaching of Business Education courses.

Recommendations

From the findings, the following recommendations were made:

New technologies such as smart board, mimeo board, teleconferencing, video conferencing amongst others should be used by Business Education lecturers in teaching Business Education courses as variation in teaching methods sustain students' interest in the course and enhance understanding.

There should be periodic training and re-training of lecturers to enable them adapt to the usage of new technologies

There should be adequate provision of physical infrastructure and other instructional materials by the stakeholders in Business Education to support the use of new technologies in the teaching of Business Education courses.

References

- Achilike, A. N. (2012). Education: The Deserving Insulation from Territorial, Economic and Technological Disasters of the Vision 2020 Saga. *Journal of Education and Social Sciences*, 4 (3), 33-39.
- Akpomi, M.E. & Ordu, P. (2009). Modern Office Technology and the Secretary's Productivity in Private Business Organizations. *African Journal of Business Management*, 3(8) 333-339.
- Amesi, J. & Akpomi, M. E. (2013). Application of New Technologies and Mentoring Strategies In Business Education in Rivers State. *International Journal of Accounting Research* 1(5),11-20.
- Ezenwafor, J. I. (2012). Adequacy of Exposure to Information and Communication Technology by Graduating Business Education Students of Tertiary Institutions in Anambra State. *Business Education Journal*. 7(2),145-165.
- Isiyaku, D. D., Ayub, A. F. & Abdulkadir, S. (2015). Empirical Modeling of Information and Communication Technology Usage Behavior among Business Education Teachers in Tertiary Colleges of a Developing Country. *South African Journal of Education*.35(4),1-14
- Madu, I. C., Obidi, U. E. & Genevive, O. C. (2015). Challenges of Integrating New Technologies for Teaching and Learning in the Business Education Programme of Colleges of Education in South-East Nigeria. *Educational Journal*, 4, (6-1), 9-14.



- McGrath, S. & Akoojee, S. (2009). Vocational Education and Training for Sustainability in South Africa: The Role of Public and Private Provision. *International Journal of Educational Development*. 29(2),149-156
- Mumford, L. (2010). *Technics and Civilization*. University of Chicago Press. Nedum-Ogbede, P. O. (2016). New Technologies in Business Education: Challenges and the Way Forward. *Nigerian Journal of Business Education* 3 (2), 104-111.
- Nwagwu, L. & Azih, N. (2016). Status of Technologies in Business Education Departments of Tertiary Institutions in Ebonyi State for Effective Integration of Electronic Learning. *British Journal of Education*, 4 (4), 49-59.
- Nwogu, U. F., Udoye, N. R. & Oguejiofor, C. S. (2014). Towards Utilization of e-learning in preparing Business Education Students for the World of Work. *An International Multidisciplinary Journal, Ethiopia*. 8 (3), 155-164.
- Obodoeze, F.O. (1996). *Modern Textbook of Research Methodology*. Academic Publishing Company, Enugu.
- Oliver, Y. B. (2011). The Impact of Cooperative Education on the Performance of Business Students in Practical Vocational Business Courses. *Multidisciplinary Journal of Academic Excellence*, 17 (2), 78-85.
- Oriki, K. U., Iyalla, I., & Okereke, G. O. (2017). Competency of Business Education Students in Information Communication Technology (ICT) for Learning in Tertiary Institutions in Rivers State. *International Journal of Advanced Academic Research Arts, Humanities and Education*, 3 (6), 1-11.
- Onyia, C. & Offorma, G. C. (2011). Learning Style Preferences of Nigerian University Undergraduates: Implications for New Faculty Development Model. *Journal of Learning in Higher Education*, 7 (2), 145-165.
- Oye, N. D., Iahad, N. A., & Rabin, Z. A. (2011). A Model of ICT Acceptance and Use for in Higher Education Institutions. *International Journal of Computer Science and Communication Networks*, 1 (1), 22-40.
- Sife, A.S., Lwoga, E. T., & Sanga, C. (2007). New Technologies for Teaching and Learning: Challenges for Higher Learning Institutions in Developing Countries. *International Journal of Education and Development Using ICT*, 3 (2), 57-67.