



PERCEIVED CONSTRAINTS IN THE APPLICATION OF NEW TECHNOLOGIES IN BUSINESS EDUCATION IN SOUTH-SOUTH UNIVERSITIES, NIGERIA

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Abstract

The study assessed perceived constraints in the application of new technologies in Business education in south-south universities, Nigeria. The descriptive survey design was adopted. Three research questions and three hypotheses guided the study. The population of the study which serves as sample comprises 134 Business education lecturers. A 37-item questionnaire was used for data collection. The face and content validity of the questionnaire was done by three experts in Measurement and Evaluation and four experts in Business education at the Delta State University, Abraka. The internal consistency of the instrument was established by administering it to 14 Business education lecturers at the Nnamdi Azikiwe University, Awka. These data were analyzed using Cronbach Alpha which yielded reliability coefficient of 0.88 on research question one, 0.91 on research question two and 0.86 on research question three. Mean and standard deviation were used for analysis of data. The findings on constraints in the application of new technologies in Business education in universities are government-contributed constraints, lecturers-contributed constraints and student-contributed constraints. Among the recommendations are that government should give adequate funding to Business education programme and organize training programmes for lecturers on utilization of modern technologies.

Keywords: *Constraints, Application, New Technologies, Business Education, Universities*

Introduction

Business education is a field of study which has to do with education for and about business. It involves training the individual in business knowledge, skills and attitude to enable them establish their business. Business education as a programme of instruction consists of two parts (1) Office education: a vocational programme of office careers through initial, refresher and upgrading education and (2) General Business education: a programme which provides students with information and



competences needed by all in managing personal business affairs and in using the services of the business.

Business education is a branch of vocational education that prepares students for entry into and advancement in jobs within business and it is equally important because it prepares students to handle their own business affairs and to function intelligently as consumers and citizens in a business economy. The National Open University of Nigeria (NOUN) (2008) defines Business education as an aspect of vocational education that equips people with necessary skills and theoretical knowledge needed for performance in the business world either for job occupation or self-employment.

Njoku (2006) defines Business education as that facet of educational training that helps the individual to acquire relevant skills needed for living. Njoku (2006) further states that business education as an educational programme equips individuals with functional and sellable skills, knowledge, attitude and values that will enable them operate in the environment in which they find themselves. Business educators have to adopt the use of new technologies in order to produce the relevant graduates that meet the need of modern society which is frequently changing with the impact of technological gadgets.

Business education like any other field of study embraces changes by the use of new technologies to impart knowledge to the students. According to Akhilele and Oghogho (2019), Technology can be referred to as that branch of knowledge that deals with the creation and application of scientific method to solve problems in our daily life. Atueyi (2009) observes that technology is considered to be the process by which humans modify nature to meet their needs and wants. Raymond (2006), indicates that technology is a general term for the processes by which human beings fashion tools and machines to increase their control and understanding of the material environment. Global changes in technology have greatly affected the office environment and turned it into Electronic Office which is equipped with modern technologies and facilities including Computers, Photocopiers, Laminating Machines, Scanners, Projectors, Printers, Internet Among others. This unending advancement in technology has greatly affected the output of Office Managers in terms of efficiency, accuracy and quality. The following are new technological tools used in teaching and learning business education programmes: Key Boarding, Use of Tools and Mail Merge.



New technologies in Business education programme, according to Achugbue (2011) have posed many challenges to business educators in Nigerian universities. Business education programme will achieve the desired goals of teaching if such modern technological teaching aids like computers, electric typewriters, television sets, projectors, internet facilities, among others are adequately provided and utilized by students and lecturers. Many universities do not give adequate attention to the acquisition and utilization of new instructional technologies needed for teaching and learning. The shortage of these facilities make it difficult to teach and prepare Business education students for the use of new technologies.

The following are challenges affecting the use technologies in Business education programme: Njoku (2015) observes that the absence of proper funding, Severe power outage is another economic challenge that has a great impact on using new technologies, Inadequacy of facilities to cater for the needs of large number of students and Poor maintenance culture. According to Abdulkadir (2019), some benefits of application of new technologies in Business education are: Promotes Individual learning and Research, Makes Educational Materials Accessible, Improves Students Attitude towards Learning and Prepares Students for Change

Earlier study of Ezeabil, Ekoh and Okwor (2019) revealed the following challenges to the utilization of new technologies in Business education programme of public universities in South East Nigeria: poor funding of ICT facilities in the universities, politicization of new technology projects in the universities, lack of government support on innovative teaching approaches in Business education, low level of supervision of tertiary education programme by relevant authorities, lack of legislative framework on the utilization of new technologies in the universities, high level of political bottleneck on the implementation of ICT projects, high level of corruption in the government system, employment of inexperienced business educators to the universities to teach and appointment of unqualified administrators, inadequate knowledge of the new technologies by business educators, laziness on the part of the lecturers in using the new technologies, absence of interest in attending seminars/conferences on new technologies, mal-handling of the new technologies resulting in destruction, poor cooperation of the administrators towards the needs of new technologies, unwillingness of some lecturers to adopt new technologies, unwillingness in sponsoring themselves for new technologies and non-relatedness of the available new technology facilities to the lecture instructions(Ezeabil, Ekoh and Okwor, 2019).In the same vein, Amesi and Allison (2019) identified some



challenges which are: lack of space, unavailability of power supply, dearth of machine/equipment, lack of maintenance, inadequate training opportunities for business educators, inability of business educators to utilize available devices and lack of professional development for business educators.

Statement of the Problem

Introducing new technologies in Business education into classroom instruction in Nigerian universities means more than teaching basic computer skills and software programs. Effective new technologies application must happen across the curriculum in ways that deepen and enhance the teaching and learning process. New technologies must support four key components of learning: active engagement, participation in groups, frequent interaction and feedback, and connection to real-world. New technologies change the way teachers teach, students learn, students understand and this enhances the relationship between teachers and students. Unfortunately, the application of modern technologies in Business education has suffered some setbacks. These have resulted in non-acquisition of the relevant skills needed by students after graduation. The problem of the study is therefore, what are the challenges in the application of modern technologies in Business education in universities in south-south Nigeria.

Research Questions

The following research questions were raised for the study:

To what extent are government-contributed constraints in application of new technologies in universities in south-south Nigeria?

To what extent are lecturers-contributed constraints in the application of new technologies in universities in south-south Nigeria?

To what extent are students-contributed constraints in the application of new technologies in universities in south-south Nigeria?

Research Hypotheses

The following hypotheses guided were formulated for the study:

There is no significant difference in the mean ratings between male and female Business education lecturers on government-contributed constraints in the application of new technologies in universities in south-south, Nigeria.

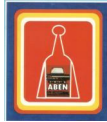
There is no significant difference in the mean ratings between male and female lecturers on lecturers-contributed constraints in the application of new technologies in universities in south-south Nigeria



There is no significant difference in the mean ratings between male and female lecturers on Students-contributed constraints in the application of new technologies in universities in south-south Nigeria

Method

This study adopted the descriptive survey research design which assessed extent of perceived constraints in the application of new technologies in Business education in south-south universities, Nigeria. The Federal Universities offering Business education are; University of Benin, Federal University Otuoke, University of Uyo and University of Calabar while the state universities offering Business education are: Ambrose Alli University, Ekpoma, Delta State University, Abraka, Niger Delta University, Wiberforce Island Yenagoa, Rivers State University, Port Harcourt, Ignatius Rufus University of Education, Port Harcourt, and Cross River State University of Science and Technology, Akangba. The population of the study which serves as sample comprises of 134 Business Education lecturers. A 37-item questionnaire was the instrument used for this study. The questionnaire was divided into two parts. Part A contains three (3) items of demographic variables such as type of institution, sex, job experience while Part B contains 34 items which are based on the research questions. The questionnaire was structured on 4 point rating scale of Very High Extent (VHE), High Extent (HE), Low Extent (LE) and Very Low Extent (VLE). The face and content validity of the questionnaire was done by 3 experts in Measurement and Evaluation and 4 experts in Business Education at Delta State University, Abraka. All their suggestions were taken into consideration and corrected before the final copy of the questionnaire was written and used for data collection. The internal consistency of the instrument was established by administering 14 copies of the questionnaire to 14 lecturers in Business Education Department at Nnamdi Azikiwe University, Awka, located in south east Nigeria. The data collected were analyzed using Cronbach Alpha which yielded reliability coefficient of 0.88 on the first research question, 0.91 on research question 2 and 0.86 on research question 3. The questionnaire was administered to 156 lecturers but 134 copies were fully completed and returned (85.9%). Mean and standard deviation were used for data analysis. The research question has four options of Very High Extent (VHE) - 4 points, High Extent (HE) - 3 points, Low Extent (LE) - 2 points, Very Low Extent (VLE) - 1 point. In decision rule, any item which has a mean of 2.5 and above was regarded as High Extent while any mean item of less than 2.5 was regarded as Low Extent. In testing the hypotheses, if t-calculated is greater than table value, the



hypothesis is rejected, on the other hand if t-calculated is less than table value, the hypothesis is therefore retained.

Results

The result of the research questions are:

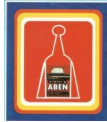
Research Question 1

To what extent is government contributed constraints in application of new technologies in universities in south-south?

Table 1: Respondents mean rating on extent of government contributing constraints in application of new technologies in universities in south-south . N= 134

| S/N | Items on Government contributed constraints to the application of new technologies in business education programme include: | \bar{x} | SD | Decision |
|--------------------|---|-------------|-------------|--------------------|
| 1 | Poor funding of ICT facilities in the universities | 3.10 | 0.94 | High extent |
| 2 | Politicization of new technology projects in the universities | 2.95 | 0.84 | High extent |
| 3 | Lack of government support on innovative teaching approaches in business education | 2.88 | 0.78 | High extent |
| 4 | Low level of supervision of Business education programme by relevant authorities | 2.96 | 0.92 | High extent |
| 5 | Lack of legislative framework on the utilization of new technologies in the universities | 2.54 | 0.82 | High extent |
| 6 | High level of political bottleneck on the implementation of ICT projects | 2.74 | 0.88 | High extent |
| 7 | High level of corruption in the government system | 2.98 | 0.80 | High extent |
| 8 | Employment of inexperienced business educators to the universities to teach | 2.58 | 0.76 | High extent |
| 9 | Appointment of unqualified administrators | 2.68 | 0.89 | High extent |
| 10 | Poor policy implementation by government on the utilization of modern technologies | 2.78 | 0.94 | High extent |
| Grand Total | | 2.81 | 0.81 | High extent |

In the table 1, all the items listed from 1-10 have their mean ranges from 2.54 3.10 meaning these items to a high extent are government contributed constraints in the application of modern technologies.



Research Question 2

To what extent are lecturers contributed constraints in the application of new technologies in universities in south-south Nigeria?

Table 2: Respondents mean rating on lecturers contributed constraints in the application of new technologies in universities in south-south Nigeria. N= 134

| S/N | Items on Lecturers-contributed constraints in the application of new technologies in Business education: | \bar{x} | SD | Decision |
|--------------------|--|-------------|-------------|--------------------|
| 10 | Inadequate knowledge of the new technologies by Business education lecturers | 2.78 | 0.87 | High extent |
| 11 | Laziness on the part of the lecturers in using the new technologies | 2.92 | 0.82 | High extent |
| 12 | Absence of interest in attending conferences on new technologies | 2.84 | 0.74 | High extent |
| 13 | Inability to handle new technologies resulting to destruction | 2.68 | 0.88 | High extent |
| 14 | Poor cooperation of the lecturers to the needs of new technologies | 2.72 | 0.94 | High extent |
| 15 | Unwillingness of some lecturers to adopt new technologies | 2.88 | 0.83 | High extent |
| 16 | Unwillingness to learn new technologies | 2.91 | 0.81 | High extent |
| 17 | Non-availability of new technology facilities to the lecturers | 2.76 | 0.96 | High extent |
| 18 | Inability of lecturers' technical knowledge to provide materials | 2.94 | 0.75 | High extent |
| 19 | Learning with computer aided tools is an issue for most lecturers | 2.77 | 0.98 | High extent |
| 20 | Insufficient training of students by lecturers on the use of learning with modern technologies | 2.97 | 0.75 | High extent |
| 21 | Inability of students to adapt to the constant changes in usage of modern technological tools | 2.82 | 0.77 | High extent |
| 22 | Inadequate time to effectively utilize modern technology teaching by the lecturers | 2.69 | 0.75 | High extent |
| 23 | Lack of continuity of learning in e-learning application software by the lecturers | 2.73 | 0.89 | High extent |
| 24 | Lack of maintenance of technological tools for effective learning teaching by the lecturers | 2.59 | 0.71 | High extent |
| 25 | High cost of acquiring modern technologies in the classroom | 2.76 | 0.83 | High extent |
| Grand Total | | 2.80 | 0.86 | High Extent |



In the table 2, all the items listed from 11-25 have their mean ranges from 2.59 2.92 meaning these items to a high extent are lecturers-contributed constraints in the application of modern technologies.

Research Question 3

To what extent are students contributed constraints in the application of new technologies in universities in south-south Nigeria?

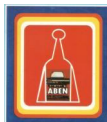
Table 3: Respondents mean rating on students contributed constraints in the application of new technologies in universities in south-south Nigeria N=134

| S/N | Items on Students' contributed constraints in the application of new technologies in Business education: | \bar{x} | SD | Decision |
|--------------------|--|-------------|-------------|--------------------|
| 26 | Business education students are not ready to purchase new equipment for learning | 2.78 | 0.87 | High extent |
| 27 | Business education students do not attend class regularly | 2.92 | 0.82 | High extent |
| 28 | Absence of interest in attending conferences on new technologies by Business education students' | 2.84 | 0.74 | High extent |
| 29 | Inability to handle new technologies resulting to destruction | 2.68 | 0.88 | High extent |
| 30 | Unwillingness of some students' to adopt new technologies | 2.88 | 0.83 | High extent |
| 31 | Unwillingness to learn new technologies by Business education students' | 2.89 | 0.81 | High extent |
| 32 | Inability of the students to continuously practice new technologies | 2.76 | 0.96 | High extent |
| 33 | Inability to learn with computer aided tools is an issue for most students' in Business education | 2.75 | 0.98 | High extent |
| 34 | Inability of students to adapt to the constant changes in usage of modern technological tools | 2.87 | 0.77 | High extent |
| Grand Total | | 2.89 | 0.81 | High Extent |

In the table 3, all the items listed from 26-34 have their mean ranges from 2.68 2.92 meaning these items to a high extent are students contributed constraints in the application of new technologies.

Test of Hypotheses:

There is no significant difference in the mean ratings between male and female Business education lecturers on government contributed constraints in the application of new technologies in universities in south-south, Nigeria.



There is no significant difference in the mean ratings between male and female lecturers on lecturers contributed constraints in the application of new technologies in universities in south-south Nigeria

There is no significant difference in the mean ratings between male and female lecturers on students contributed constraints in the application of new technologies in universities in south-south Nigeria

There is no significant difference in the mean ratings between male and female Business education lecturers on government-contributed constraints in the application of new technologies in universities in south-south, Nigeria

Table 4: *t-test result of mean ratings of male and female Business education lecturers on government-contributed constraints in the application of new technologies in universities in south-south.*

| Variables | N | 0 | SD | df | t-cal | t-crit | Decision |
|-----------|----|------|------|-----|-------|--------|----------|
| Male | 76 | 2.76 | 0.85 | 132 | 1.74 | 1.96 | NS |
| Female | 58 | 2.65 | 0.91 | | | | |

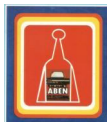
The calculated t-test of 1.74 is less than t-crit at 1.96 at 0.05 level of significance. The hypothesis which states that there is no significant difference, in the mean ratings between male and female Business education lecturers on government-contributed constraints in the application of new technologies in universities in south-south, Nigeria is retained.

There is no significant difference in the mean rating between male and female lecturers on lecturers-contributed constraints in the application of new technologies in universities in south-south Nigeria.

Table 5: *t-test result of mean ratings of male and female Business education lecturers on lecturers-contributed constraints in the application of new technologies in universities in south-south Nigeria.*

| Variables | N | 0 | SD | df | t-cal | t-crit | Decision |
|-----------|----|------|------|-----|-------|--------|----------|
| Male | 76 | 2.71 | 0.89 | 132 | 1.78 | 1.96 | NS |
| Female | 58 | 2.66 | 0.92 | | | | |

The calculated t-test of 1.78 is less than t-crit at 1.96 at 0.05 level of significance. The hypothesis which states that there is no significant difference, in the mean ratings between male and female Business education lecturers on lecturers-contributed



constraints in the application of new technologies in universities in south-south Nigeria is retained.

There is no significant difference in the mean ratings between male and female lecturers on students-contributed constraints in the application of new technologies in universities in south-south Nigeria

Table 6: *t-test result of mean ratings of male and female Business education lecturers on students-contributed constraints in the application of new technologies in universities in south-south Nigeria.*

| Variables | N | 0 | SD | df | t-cal | t-crit | Decision |
|-----------|----|------|------|-----|-------|--------|----------|
| Male | 76 | 2.69 | 0.87 | 132 | 1.68 | 1.96 | NS |
| Female | 58 | 2.58 | 0.82 | | | | |

The calculated t-test of 1.68 is less than t-crit. 1.96 at 0.05 level of significance. The hypothesis which states that there is no significant difference in the mean ratings between male and female Business education lecturers on students-contributed constraints in the application of new technologies in universities in south-south Nigeria is retained.

Discussion of Major Findings

In table 1, the study reveals the following to a high extent as ways in which the government is contributing constraints in the application of new technology in Business education programme as perceived by lecturers. Poor funding of ICT facilities in the universities, politicization of new technology projects in the universities, lack of government support on innovative teaching approaches in business education, low level of supervision of Business education programme by relevant authorities, lack of legislative framework on the utilization of new technologies in the universities, high level of political bottleneck on the implementation of ICT projects, high level of corruption in the government system, employment of inexperienced business educators to the universities to teach, appointment of unqualified administrators and poor policy implementation by government on the utilization of modern technologies. This study is consistent with the earlier study of Ezeabil, Ekoh and Okwor (2019), and Amesi & Allison (2019) that identify similar government challenges facing the application of new technologies in Business education.



In table 2, The study reveals the following, to a high extent, as ways in which lecturers are contributing constraints in the application of new technology in Business education programme as perceived by lecturers. Inadequate knowledge of the new technologies by business education lecturers, laziness on the part of lecturers in using the new technologies, absence of interest in attending conferences on new technologies, inability to handle new technologies resulting in destruction, poor cooperation of the lecturers towards the use of new technologies, unwillingness of some lecturers to adopt new technologies, unwillingness to learn new technologies, non-availability of new technology facilities to the lecturers, inability of lecturers technical knowledge to provide materials, learning with computer aided tools is an issue for most lecturers, Insufficient training of students by lecturers on the use of learning with modern technologies, insufficient training of students by lecturers on the use of learning with modern technologies, inability of students to adapt to the constant changes in usage of modern technological tools, inadequate time to effectively utilize modern technology for learning, lack of continuity in e-learning application software, lack of maintenance of technological tools for effective learning and high cost of acquiring and installing modern technology in the classroom. This study is consistent with the earlier study of Ezeabil, Ekoh and Okwor (2019) and Amesie Allison (2019) that identify similar teachers challenges facing the application of new technologies in Business education

In table 3, The study reveals the following to a high extent, as ways in which students are contributing constraints in the application of new technology in Business education programme as perceived by lecturers. Business education students are not ready to purchase new equipment for learning, Business education students do not attend class regularly, absence of interest in attending conferences on new technologies by Business education students, inability to handle new technologies resulting to destruction, unwillingness of some students to adopt new technologies, unwillingness to learn new technologies by Business education students, non-availability of new technology facilities to the students, learning with computer aided tools is an issue for most students' in Business education and inability of students to adapt to the constant changes in usage of modern technological tools.

The result of the hypotheses are; there is no significant difference in the mean ratings between male and female Business education lecturers on government contributed constraints in the application of new technologies in universities in south-south, Nigeria, there is no significant difference in the mean ratings between male and



female lecturers on lecturers contributed constraints in the application of new technologies in universities in south-south Nigeria and there is no significant difference in the mean ratings between male and female lecturers on students contributed constraints in the application of new technologies in universities in south-south Nigeria.

Conclusion

In Business education programme using new technologies as a system of education by lecturers and students will enhance tremendous improvement in today's educational system in Nigeria and more especially in Business education in Nigerian universities. Introducing the use of computer (Computer appreciation) and other technological equipment in schools and equipping Business education teachers with adequate technological skills will greatly prepare Business education graduates to excel in the world of work which has globally turned into automated environment.

Recommendations

The following recommendations are made for this study:

- University authorities should allocate adequate funds to purchase equipment for Business education programmes in Nigerian universities.
- Lecturers should always endeavor to update their skills on new technologies in order to improve in their work performance.
- Business education students should undergo training and retraining programmes to enable them handle new technologies to avoid destruction.

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