

PERCEIVED CONTRIBUTIONS OF ICT RESOURCES TO QUALITY IN BUSINESS EDUCATION PROGRAMMES IN UNIVERSITIES IN SOUTH-WEST NIGERIA

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Abstract

The need to ensure quality necessitated this study on perceived contributions of information and communication technology (ICT) resources to teaching and learning of business education in South-West Nigeria. Two research questions guided the study while three null hypotheses were tested. Descriptive survey design was adopted for the study. Population was all 550 (52 lecturers and 498 final year students) of business education from all universities in the area that offer the programme. A sample size of 302 (all 52 lecturers and 250 students) was drawn using stratified random sampling techniques. A validated questionnaire containing 24 items in two sections was used for data collection. Reliability of the instrument was established through a pilot study involving 10 business education lecturers and 20 students of universities in South-East Nigeria. Using Cronbach alpha, reliability coefficients of 0.75 and 0.86 were obtained for the two sections with an overall coefficient of 0.81. Mean and standard deviation were used to answer the research questions and determine the closeness of the respondents mean ratings while z-test was adopted to test the null hypotheses at 0.05 level of significance. The instrument was administered to the respondents in their universities personally by the researchers with the help of four research assistants drawn from the universities. Findings revealed that the lecturers and students perceived that ICT resources contribute to quality teaching and learning in business education programmes at a great extent. It was further found that gender, status and institution ownership did not significantly influence the respondents' mean ratings. Based on the findings, it was concluded that ample utilization of ICT resources will significantly enhance quality in business education programmes of universities. It was, therefore, recommended among others that management of universities should

adequately provide ICT resources for business education programmes in order to boost their utilization by lecturers and students for quality teaching and learning. Government should also make stringent policies to enforce and strengthen utilization of ICT resources for quality teaching and learning in the university business education programmes.

Introduction

Information and Communication Technologies (ICTs) have become key tools and have a revolutionary impact on how people see and live in the world. These technologies have become so important that every country, organization or institution no matter how highly or lowly placed want to embrace them. Modern day businesses are conducted and facilitated through the use of ICT facilities such as telephones, fax machines and computer communication networks through the Internet. They are used globally to translate ideas into realizable goals and develop some into concrete achievement. ICTs are useful in the areas of agriculture, engineering, medicine, law, architecture, aviation, commerce, insurance, banking and finance as well as different fields of education including business education. This phenomenon has given birth to the contemporary e-commerce, e-medicine, e-banking and e-education among others. Bandele (2006) summed up that ICT is a revolution that involves the use of computers, Internet and other telecommunication technology in every aspect of human endeavour. Bandele posited that ICT is simply about sharing and having access to data and information with ease. It is regarded as super highway through which information is transmitted and shared by the people all over the world.

ICT resources can be described as tools with which people handle with the information and communication processing needs of organizations. They encompass the computer hardware and software; the network and several other devices such as video, audio, photography and camera among others that convert information (text), images, sound, and motion into common digital form (Vannili, 2015). ICT resources have a wider spectrum of application and utilization with enormous relevance to teaching and learning activities in universities. They have the potential to contribute to substantial improvements in the educational system as they provide for innovative teaching and learning and engender advances in research about how people learn leading to issues such as rethinking the structure of education (Lopez, 2003). It is widely acknowledged that ICT resources can be used to improve the quality of teaching and learning in all academic programmes at different levels of the education system. This was recognized by the Federal Republic of Nigeria (FRN, 2004 and 2013) in emphasizing provision and utilization of ICTs in

education because of their prominent roles in advancing knowledge and skills necessary for effective functioning in the modern world and the urgent need to integrate them into education in the country. Supporting the view, the Federal Ministry of Education (2011) affirmed that quality learning outcomes depend on the quality of teaching and learning inputs which include ICTs and their qualitative processing by lecturers and students.

The prevalence and rapid development of ICT have transformed human society from the information age to the knowledge age (Galbreath, 2000). In fact, ICT is becoming a natural part of man's daily life and its use in education is widely acknowledged. There is an international consensus on the importance of intellectual input in creating value which underlines the need for investment in education and skills in general with special focus on ICT skills and research development. ICT provides lecturers and students relevant materials needed through the Internet. Such quality materials are used in equipping the students and upgrading their knowledge in their field of study. It is evident that ICT incorporates and extends some of the power of reading, writing and arithmetic. It facilitates the automation of many mental activities. ICT has proven to be a valuable aid to solve problems and accomplishing task in education, business, industry, science and many other human endeavours, thus Tinio (2002) elucidates on the benefits of ICTs to education as follows:

- ICT-enhanced learning mobilizes tools for examination, calculation and analysis of information in order to provide a platform for student inquiry, analysis and construction of new information. The learners therefore, learn as they do and, whenever appropriate work on real-life problems in-depth. Moreover, ICT makes the learning less abstract and more relevant to their life situations. In contrast to memorization-based or rote learning, that is the feature of traditional pedagogy; ICT-enhanced learning promotes increased learner engagement. ICT-enhanced learning can also be 'just-in-time' learning that the learners choose what to learn when they need.
- ICT-supported learning encourages interaction and cooperation among students, teachers and experts regardless of their geographical locations. Apart from modeling real world interactions, ICT-supported learning provides opportunity to work with students from different cultures, thereby helping to enhance learners' teaming to build communication skills and increase their global awareness. It models learning throughout the learner's lifetime by expanding the pace to include not only peers but also mentors and experts from different fields.

- ICT-supported learning promotes the manipulation of information and the creation of real-world products rather than mere duplication of received information by learners in tests and examinations.
- ICT-enhanced learning promotes a thematic integrative approach to teaching and learning which eliminates the artificial separation between disciplines and between theory and practice which characterize the traditional approach.
- ICT-enhanced learning is student-directed and diagnostic. Unlike static, text or print-based education, ICT-enhanced learning recognizes the presence of different learning pathways to explore and discover rather than merely listen and remember.

Today, ICT provides knowledge based system that includes knowledge acquisition, knowledge incubation, knowledge amplification and knowledge dissemination. It is evident that information is a key resource which permeates teaching, learning, research and publishing. Governments all over the world are harnessing the rich potentials of ICTs and using them as tools for educational development, economic recovery and wealth creation. Today, no nation can attain its desired height educationally, economically and socially without the use of ICTs. ICT resources are expected to contribute to effective teaching and learning in all fields of study including business education in Nigeria. Despite the numerous benefits of ICT resources to education, the extent of their contributions to quality in the field of business education in universities in South-West Nigeria is not quite clear hence the need for this study.

In developed countries of the world, ICTs have been found to facilitate qualitative teaching and learning in different fields of education. If these resources are optimally utilized in business education programmes in Nigeria by competent lecturers, qualitative learning outcomes will be guaranteed. However, researchers such as Aginam (2006), Akuegwu, Nwiue and Agba (2008) and Onasanya, Shehu, Oduware and Shettu (2010) reported that most tertiary institutions lecturers in Nigeria lack adequate pedagogical knowledge for effective utilization of ICT resources for teaching especially in business education programmes. This is why it is common to see Nigerian business education graduates enroll in roadside computer centers to acquire ICT skills which they ought to have mastered in their universities days. Therefore, there seems to be a gap in the practical skills especially as regards the ICT resources utilization proficiency in the present teaching of business education courses.

Anoke (2008) reported that employer of labour in Nigeria including local and multinational companies widely complain that business education

graduates in their employment are unable to manipulate basic ICT resources which are their fundamental tools of operation. This ugly situation may not be unconnected with the report of Bolaji (2007) that ICT resources are not adequately utilized in teaching business education courses in the nations' tertiary institutions. In addition to the above, students and lecturers also express their dissatisfaction with the use of obsolete equipment and machines like manual typewriters in teaching and learning in business education when the work environments have become automated. If objective steps are not taken to enhance utilization of ICT resources in the teaching and learning business education programmes in Nigeria especially in the universities, the products will remain incapable of performing in the office and business environments of the current technological era. The question now is how lecturers and students in universities in South-West perceive the contributions of ICT resources to quality in business education. This is important as it will motivate them to press the management of their universities to improve supply of ICT resources as well as seek help from the industry.

The following research questions and hypotheses guided the study:

1. From the perceptions of students, to what extent do ICT resources contribute to quality teaching and learning in business education programmes in universities in South-West Nigeria?
 2. From the perceptions of lecturers, to what extent do ICT resources contribute to quality teaching and learning in business education programmes in universities in South-West Nigeria?
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1. Male and female respondents do not differ significantly in the mean ratings of their perceived contributions of ICT resources to quality teaching and learning in business education programmes in universities in South-West Nigeria.
 2. Lecturers and students do not differ significantly in the mean ratings of their perceived contributions of ICT resources to quality teaching and learning in business education programmes in universities in South-West Nigeria.
 3. Respondents do not differ significantly in the mean ratings of their perceived contributions of ICT resources to quality teaching and learning in business education programmes in universities in South-West Nigeria as a result of their institution ownership.

The hypotheses were tested at 0.05 level of significance.

Method

Descriptive survey research design was adopted for the study. Area of the study was South-West Nigeria covering Ekiti, Lagos and Ogun States. Population for the study was 550 (52 lecturers and 498 final year students) of business education from all universities offering the programme. The choice of final year students was informed by the fact that they have spent long enough time in the programme and can form an opinion on any issue relating to their study. A sample size of 302 (all 52 lectures and 250 students) was drawn and used for the study. Stratified random sampling technique was used to draw 50 percent of students from each university. Instrument used for data collection was a validated five point rating scale questionnaire with a total of 24 items in two clusters according to the research questions. A pilot study involving 10 business education lecturers and 20 students from universities in South-South Nigeria who were not part of the study population and use of Cronbach alfa yielded reliability coefficients of 0.75 and 0.86 for the two sections with an overall reliability coefficient of 0.81. The instrument was administered to the respondents in their universities personally by the researchers with the help of four research assistants who were briefed on the procedure. On the spot method was used for the two groups of respondents but most of the lecturers were revisited for retrieval of their responses as they could not respond on the spot. This facilitated a very high response rate as all 302 copies were retrieved and used for analysis. Arithmetic mean and standard deviation were used to analyze data to answer the research questions and ascertain the homogeneity or otherwise of the respondents' mean ratings. Decision on the research questions was based on the cluster mean relative to real limits of numbers. z-Test was used to test the null hypotheses at 0.05 level of significance. A null hypothesis was upheld where the calculated z-value was less than the z-critical value but rejected where the calculated z-value was equal to or greater than the z-critical value.

Results

Table 1: Mean and Standard Deviation of Students' Perceptions on the Extent ICT Resources Contribute to Quality in Business Education Programmes in Universities in South-West Nigeria

N=250						
S/N	Contributions of ICT resources		Mean	SD	Remarks	
1	Enhances productivity in business education		3.59	0.86	Great Extent	
2	Improves teaching effectiveness		4.06	0.68	Great Extent	

3	Increases productivity and professional growth of lecturers	4.00	0.57	Great Extent
4	Promotes effective evaluation in business education	3.99	0.34	Great Extent
5	Facilitates decision making and problem solving	3.92	0.62	Great Extent
6	Facilitates collaborative efforts for quality assurance	4.13	0.69	Great Extent
7	Promotes creativity among lecturers and students	3.92	0.79	Great Extent
8	Improves employability potentials of students	4.14	0.77	Great Extent
9	Enhances the administration in the programme	3.96	0.84	Great Extent
10	Enhances the quality of research	3.86	0.81	Great Extent
11	Enhances global competitiveness of the graduates	4.14	0.75	Great Extent
12	Enhances students practical skills acquisition	4.01	0.67	Great Extent
Cluster Mean		3.98		Great Extent

Table 1 shows that all the items had mean ratings ranging from 3.59 - 4.14 with a cluster mean of 3.98. This shows that the students perceived that ICT resources contribute to quality in business education programme in their universities to a great extent. The standard deviations for all the items are within the same range showing that the respondents were homogeneous in their opinions.

Table 2: Mean and Standard Deviation of Lecturers' Perceptions on the Extent ICT Resources Contribute to Quality in Business Education Programmes in Universities in South-West Nigeria

N = 52

S/N	Contribution of ICT resources	Mean	SD	Remarks
1	Enhances productivity in business education	4.26	0.87	Great Extent
2	Improves teaching effectiveness	4.07	0.68	Great Extent

3	Increases productivity and professional growth of lecturers	4.06	0.58	Great Extent
4	Promotes effective evaluation in business education	4.24	0.34	Great Extent
5	Facilitates decision making and problem solving	3.92	0.62	Great Extent
6	Facilitates collaborative efforts for quality assurance	4.24	0.69	Great Extent
7	Promotes creativity among lecturers and students	3.92	0.79	Great Extent
8	Improves employability potentials of students	4.15	0.78	Great Extent
9	Enhances the administration in the programme	3.96	0.84	Great Extent
10	Enhances the quality of research	3.86	0.82	Great Extent
11	Enhances global competitiveness of the graduates	4.15	0.75	Great Extent
12	Enhances students practical skills acquisition	4.02	0.67	Great Extent
Cluster Mean		4.07		Great Extent

Table 2 shows that all the items had mean ratings ranging from 3.86 - 4.26 with a cluster mean of 4.07. This shows that the lecturers perceive that ICT resources contribute to quality in business education programmes in their universities to a great extent. The standard deviations for all the items are within the same range showing that the respondents were homogeneous in their opinions

Table 3: Summary of z-Test Analysis of the Difference between the Mean Ratings of Male and Female Respondents on the Extent ICT Resources Contribute to Quality in University Business Education Programmes

Gender	N	X	SD	Df	Z-cal.	Z-crit.	Alpha sig	Remarks
Male	156	48.06	5.59					
Female	146	48.36	4.83	300	0.49	1.96	0.05	NS

Table 3 shows that the calculated z-value of 0.49 is less than z-critical value of 1.96 at 300 degree of freedom and 0.05 level of significance. This means that the respondents did not differ significantly in their mean ratings on the extent ICT resources contribute to quality in business education programmes of universities in South-West Nigeria. The null hypothesis was, therefore, upheld.

Table 4: Summary of z-Test Analysis of the Difference between the Mean Ratings of Lecturers and Students on the Extent ICT Resources Contribute to Quality in University Business Education Programmes

Status	N	Mean	SD	Df	Z-cal.	Z-crit.	Alpha sig	Remarks
Lecturers	52	47.78	6.30	300	0.54	1.96	0.05	NS
Students	250	48.28	4.99					

Table 4 shows that the calculated z-value of 0.54 is less than z-critical value of 1.96 at 300 degree of freedom and 0.05 level of significance. This means that the respondents did not differ significantly in their mean ratings on the extent ICT resources contribute to quality in business education programmes of universities in South-West Nigeria. The null hypothesis was, therefore, upheld.

Table 5: Summary of z-Test Analysis of the Difference between the Mean Ratings of Respondents from Federal and State Owned Universities on the Extent ICT Resources Contribute to Quality in Business Education Programmes

Institutions ownership	n	Mean	SD	Df	Z-cal.	Z-crit.	Alpha sig	Remarks
Federal	60	48.0	5.28	300	0.03	1.96	0.05	NS
State	242	48.0	5.22					

Table 5 shows that the calculated z-value of 0.03 is less than z-critical value of 1.96 at 300 degree of freedom and 0.05 level of significance. This means that respondents did not differ significantly in their means ratings on

the extent ICT resources contribute to quality in business education programmes of universities in South-West Nigeria based on institution ownership (federal/state). The null hypothesis was, therefore, upheld.

Discussion

Findings of the study indicated that ICT resources contribute to quality in business education programmes in universities in South-West Nigeria at great extent as perceived by the students and lecturers. This finding is in consonance with that of Fetherson in Tella (2011) that integration of ICTs into curriculum package for teaching and learning yielded a positive result for both lecturers and students. Similarly, it is in agreement with Ezeani and Akpotohwo (2014) who reported that utilization of ICT facilities in the teaching and learning of accounting education contributes to effectiveness to a great extent. This finding supports the plan of government towards integrating ICTs into the curriculum of tertiary institutions because it enhances teaching and learning in different ways. ICT-based teaching and learning makes teaching easy for lecturers and learning interesting to students. ICTs provide activity based learning whereby students are actively involved in the teaching/learning process (Tella, 2011).

Furthermore, findings of the study indicated that gender did not significantly influence the respondents' mean ratings on their perceived contributions of ICT resources to quality in business education programmes in universities in South-West Nigeria. This finding is in agreement with that of Ezeani and Akpotohwo (2014) that ICT facilities contribute greatly to teaching and learning of accounting education courses in universities in Ekiti State among lecturers and students irrespective of gender.. This finding also supports the finding of Hussain, Iqbal and Akhtar (2010) that technology based learning environment enhanced the achievement level of both male and female students.

The findings of the study also showed that lecturers and students do not differ significantly in the mean ratings of their perceived contributions of ICT resources to quality teaching and learning in business education programmes in universities in South-West Nigeria. This supports Ezenwafor, Mbaezue and Obi (2016) who reported that lecturers and students did not differ significantly in their mean ratings on the extent ICTs improve teaching and learning of business education. Also, this finding agrees with Okeh and Opone (2007) who reported that respondents, irrespective of status, were of the view that the use of ICTs leads to the production of quality graduates from educational institutions because they help students to be current and abreast of happenings around the world.

Finally, findings of the study revealed that respondents did not differ significantly in the means ratings of their perceived contributions of ICT resources to quality in business education programmes in universities in South-West Nigeria based on institution ownership. This finding agrees with Tella, Toyobo, Adika and Adeyinka (2007) who reported that ICT facilities enable teachers to implement and manage teaching and learning in flexible ways and in learner- friendly environments without recourse to type or ownership of institutions. Yusuf and Onasanya (2004) also noted that ICTs utilization empowers teachers in all types of institutions to prepare the current generation of students for future workplace. However, the finding disagrees with the report of Ezenwafor, Mbaezue and Obi (2016) that institution ownership significantly influenced the respondents' views on the extent ICTs improve teaching and learning in business education programmes in South-East Nigeria.

Conclusion

Based on the findings of this study, the researchers concluded that ample utilization of ICT resources will significantly enhance quality in business education programmes of universities in the area of the study.

Recommendations

Based on the findings and conclusion of this study, the following recommendations were made:

1. Universities management should adequately provide ICT resources for use in business education programmes to boost their utilization by students and lecturers for quality teaching and learning.
2. Universities management should encourage and sponsor business education lecturers and laboratory technologist for re-training programmes to update their ICT knowledge, skills and competencies for effective utilization of the resources for quality instructional delivery.
3. Universities management should enter into partnership with ICT manufacturers/dealers to assist in donating the resources to their institutions to ensure quality teaching and learning in different academic fields.
4. Management of universities should develop sustainable preventive and corrective maintenance culture by servicing and promptly repairing available ICT resources for optimal utilization by lecturers and students.

5. Government should make stringent policies to enforce and strengthen utilization of ICT resources to support quality teaching and learning in all programmes of universities to meet global standard of the 21st century.

References

- Aginam, E. (2006). *Nigerian higher education has less than 5% ICT applications*. Retrieved on 11/2/1007 from file <http://www.vanguardngr.com/articles/html>.
- Akuegwu, B. A., Nwiue, F. D., & Agba, A. M. O. (2008). Quality assurance in teaching and learning in Cross River State higher institutions: Management applications for UBE teacher production. *Nigeria Journal of Curriculum Studies* (Sp. Ed), 355-367.
- Anoke, F. C. (2008). Economics of providing computer for the integration of information communication technology (ICT) in Nigeria schools. *Proceedings of the first international conference of Faculty of Education. University of Nigeria, Nsukka*, 192-196.
- Bandele, S. O. (2006). Development of modern ict and internet system. In A.A. Agagu (ed). *Information and Communication Technology and Computer Applications*. Abuja: Panof Press, 1-3.
- Bolaji, L. (2007). *ICT the hopes and reality in school (1st ed.)*. Ibadan: University Press.
- Ezeani, N.S. & Akpotohwo, F.C. (2014). Intergrating information and communication technology (ICT) in accounting education instruction in ekiti state universities. *International Journal of Business and Social Science*, 5, 6(1),
- Ezenwafor, J. I, Mbaezue, A N.C. & Obi, M. (2016). Extent ICTs Adoption Improve Teaching and Learning of Business Education in South-East Nigeria. *Ideal Journal of Education and Policy Studies*, 2(5), 147-153.
- Federal Ministry of Education. (2011a). *The state of education in Nigeria: Beyond access*. Abuja: Federal Inspectorate Services.
- Federal Republic of Nigeria (2004). *National policy on education*. Lagos: National Education Research And Development Council Press (NERDC).
- Federal Republic of Nigeria (2013). *National policy on education (6th ed)*. Lagos: National Education Research And Development Council Press (NERDC).
- Galbreath, J. (2000) Knowledge management technology in education: An overview. *Education Technology*, 40(5), 28 -33.

- Hussaain, M. A., Iqbal, M. Z. & Akhtar, M. S. (2010). Technology based learning environment and student achievement in English as a foreign language in Pakistan. *Journal of World Academy of Science, Engineering, and Technology*, 6 (1), 129-133.
- Lopez, V. (2008) An exploration of the use of information technology in college classroom, *College Quarterly Review*, 40(5), 7.
- Okeh, O. D. & Opone, M.C. (2007). Information and communication technology (ICT): A veritable tool for national educational growth. *Journal of Academic*, 2 (3), 234 – 246.
- Onasanya, S.A., Shehu, R.A., Oduware, R.O. & Shettu, L.A. (2010). Higher institution lecturers' attitude towards integration of ICT into teaching and research in Nigeria. *Journal of Information Technology*, 2, 1-10.
- Tella, A. (2011). Availability and use of ict in south-western Nigerian colleges of education. *African research review: International multidisciplinary journal Ethiopia* 5(5), SN 22, 315-331.
- Tella, A., Toyobo, O. M., Adika, L. O. & Adeyinka, A. A. (2007). An assessment of secondary school teacher uses of ICT for further Development of ICT's use in Nigerian secondary school. *Turkish online Journal of Educational Technology*, 6(3), 5- 16.
- Tella, A. (2011). Availability and use of ICT in south-western Nigeria colleges of education. *African Research Review – International Multidisciplinary Journal, Ethiopia*, 5(5), 315-331.
- Tinio, V.L. (2002). *ICT in education*. New York: UNDP Free Press.
- Vannili, F. T. (2015). *Networking ICT system in 21st century*. Denmark: Osborn Leah Press Inc.
- Yusuf, M. O. & Onasanya, S. A. (2004). Information and communication technology (ICT) and teaching in tertiary institutions. In E.A. Ogunsakin (ed). *Teaching in tertiary institutions*. Ilorin: YumDal Press, 31-34.