

INFORMATION AND COMMUNICATION TECHNOLOGIES AND IT INFLUENCE ON BUSINESS EDUCATORS' JOB PERFORMANCE IN UNIVERSITIES IN RIVERS STATE

ERNEST UWANEZE JIM^{1*}, ISAAC PETER AJINWO², ROSE YEYEDA NWOSU³
^{1,2,3}*Department of Business Education, Rivers State University, Port Harcourt, Rivers State, Nigeria*

**Corresponding author: ernestjim100@gmail.com*

To cite this article (APA): Jim, E. U., Ajinwo, I. P., & Nwosu, R. Y. (2024). Information and communication technologies and it influence on business educations' job performance in universities in Rivers State. *AAU Journal of Business Educators*, 4(1), 433-441

Abstract

The study examined the influence of information and communication technologies (ICT) on business educator's job performance delivery in universities in Rivers State. Descriptive survey design was used to achieve the aim of the study. The population consisted of 98 business educators in the Universities and there was no sampling due to its manageable size. The instrument for data collection is titled: "Information and Communication Technology and Teachers Job Performance Questionnaire" (ICTTJPQ) The instrument was validated by three experts, two in business education and one in measurement and evaluation. The internal consistency and reliabilities of all the items in the instrument yielded a coefficient value of 0.88 using Cronbach alpha method. The data collected from the respondents was analyzed using mean, standard deviation and t-test statistics. The findings revealed that ICT played a significance influence on business educator's job performance in tertiary institutions in Rivers State. It was concluded that appropriate measures need to be put in place that would ensure that ICT policies are available and implemented in tertiary institutions in Rivers State. It was recommended, among others, that Government should endeavour to provide ICT facilities in all the tertiary institutions in order to influence business educator's job performance delivery in universities in Rivers State.

Keywords: Business Educators, Influence, ICT, Job Performance, Universities.

Introduction

Federal Republic of Nigeria (FRN, 2013) in her education policy document described education as an instrument "par excellence" for effecting national development. The same document explicitly stated that 'in recognition of the prominent role of information and communication technology as a modern technology in advancing knowledge and skills necessary for effective functioning in the modern world, there is urgent need to integrate information and communication technology (ICT) into education in Nigeria. The education policy document further pointed out that government shall provide necessary infrastructure and training for the integration of ICT in higher institutions and for the recognition of ICT in advancing knowledge and skills in the modern world. Adeyemi (2014) opined that a good way to think about ICT is to consider all the uses of digital technology that have already existed in helping individuals, business and organization in using necessary information. ICT involves any product that store, retrieve, manipulate, transmit or receive information, electronically, in a digital form; for example, computers, digital television, emails and robots. ICT can be defined as the combination of information Technology with other related technologies (Oloko, 2020).

Specifically, ICTs have led to the emergent Transformation of Teaching and Learning in most universities in Rivers State. As such, there is need to brace up to the new challenges and system of education through the development and use of ICT in Nigerian higher institutions. Nigeria is almost two decades behind in embracing the use of computer in her educational system (Ezekule, 2014). The successful utilization of ICT in the education system depends largely on the availability, competence and the attitude of lecturers towards the role of modern technologies in teaching and learning (Adidu, 2022). This is because research have shown that most tertiary institutions have either insufficient or no ICT tools for the ever-increasing population of students in respect institutions and where they are available, they are by implication a matter out of bounds to the students. For instance, Fakeye (2015) found that most of the tertiary institutions do not have computers, hence are not connected to the internet, and few institutions that have, do not use them for teaching the students but solely for administrative purposes. Okwadishu (2014) also found that lack of some ICT components in school hampers teachers' use of ICTs. Oloko (2014) discovered that lack of adequate search for skills and access point in the school were forces that inhibit the use of internet by secondary school teachers. Adelaya (2014) stated that the increasing profile and importance of the use of ICT in secondary education sector are visible in the performance of teachers and students. This is evidence from the fact that ICT has substantially improved teacher efficiency and speed of data collection from machine and reduce the amount of manual effort spent on administrative functions and in teaching and learning (Oloko, 2015).

There are factors impeding the optimization of ICT in education across all sectors, such factors include inadequate funding to support the purchase of the technology accessories, lack of training among established teaching practitioners, lack of motivation and need among teachers to adopt ICT for teaching and learning processes (Starr, 2014). Pelgrum (2013) observed that obstacles to ICT knowledge/skills, include difficult integrate ICT to instruction, scheduling computers times. insufficient peripherals, inadequate copies/numbers of software, insufficient teaching time, inadequate simultaneous access, inadequate supervisory staff and lack of technical assistance. In recent times, certain factors strengthen and encourage the move by the government to ensure availability of ICT in classroom and learning setting. The reasons, being this move is because the significance of ICT in tertiary institution is seen as a major drive to economic development as well as technological advancement.

The reason for this choice is that the 1988 and 2008-2011 policies emphasized the training of teachers on ICT in education and recognizing the roles of teachers in achieving the desire for a knowledge-based society. Though, the 2001 ICT policy has some lapses as it is more market drives and does not have sectorial allocation to education. The 2001 ICT policy emphasize the development of human resources (teachers) on ICT, while the 2008-2011 (ICT4DPLAN) policy contained a detailed programmed of action, strategy for application, order of event and action of description, as well as implement agencies. Adoni and Kpadan (2010) observe that the availability of ICT has brought about enormous changes and challenges on how schools are structured, and ICT is not static, it is continually evolving, break barriers, delving new horizons, bringing out new dimensions to our life style during teaching and learning. In spite of the tremendous impact and widespread usage of ICT in the administration of education system; it is pertinent to note that lecturers in public institutions in Rivers State are yet to cope with the challenges posed by ICT. In addition, the level of awareness on the extent to which ICT is useful to lectures is still low and slow in pace, in term of development, growth and productivity, due to lecturer's resistance to organization, technological, scientific and innovation changes, and over 95% of lecturers in the tertiary institutions are not willing to take the staff approach to job appraisal and performance because, the level of sensitization of lecturers on need and performance is still very insignificance.

According to Hillary (2018), instructional delivery is a method, strategies, approaches or techniques that a teacher employs to deliver his/her subject matter of a lesson to the students. The process of instructional delivery of business education courses must be based on stated objectives of course content, which need to be achieved (Jim, 2019). Business education is a core component of vocational education that involves teaching the skills and operations of the business industry. It also involves learning skills needed to run, manage and grow a business organization. It includes programmes such as accounting, marketing, management, entrepreneurship education and office management technology. These specialized area of study must be taught by qualified, experienced and competent business educators to enhance effective delivery process. If lecturers cannot effectively make good use of the ICT tools, the resource (money and time) spent on the ICT is going to be a waste on the education budget, because of limited resources. Therefore, looking for the cost-effective and high-performance of ICT tools can be the first priority for the purpose of this study as it assesses the influence of ICT on business educators' job performance delivery in universities in Rivers State.

Statement of the Problem

Various ICT regulations and plans targeted at controlling the enhancement of the subdivision and utilization of its capacity in advancing the Nigeria economy have been initiated and adopted by different political leaders in Rivers State and Beyond. Irrespective of the attempts made by the Federal Government of Nigeria in drawing these policies and integrating of ICT into the education system, as well as development of ICT literacy programmes for servicing lecturers, it is obvious that the availability, utilized and accessibility of ICT in most tertiary institutions are major challenges confronting the lecturers notwithstanding the enormous significant impact of ICT in their productive towards organization goals achievement. ICT tools must be available accessible and utilized, the lecturer should be competent enough to use them in their daily operations in the institution. The reverse might be the case. The authors of the present study, however is concern to whether the ICT tools are available and accessible and the lecturers are equally competent enough to operate the tools, to improve operational performance as well as teaching and learning in our tertiary institutions. On this basis, the study addresses the influence of ICT on business educators' job performance delivery in universities in Rivers State.

Purpose of the study

The aim of this study is to examine the influence of ICT on business educators' job performance delivery in universities in Rivers State. The study specifically examined:

1. The level of ICT facilities utilization by business educators in the delivery of business education courses in universities in Rivers State.
2. The challenge facing ICT facilities utilization in business educators' job performance delivery in universities in Rivers State.

Research Questions

The following research questions guided the study.

Research Question 1: What are the level of ICT utilization by business educators in delivery of business education courses in universities in Rivers State?

Research Question 2: What are the challenges facing the use of ICT on business educators' job performance delivery in universities in Rivers State?

Research Hypotheses

The following null hypotheses were formed and tested at a 0.05 level of significance.

Research Hypothesis 1: There is no significance difference between the mean ratings of male and female business educators on ICT utilization in delivery of business education courses in universities in Rivers State.

Research Hypothesis 2: There is no significance difference in the mean ratings of male and female business educators on the challenges facing the use of ICT on business educators' job performance delivery in universities in Rivers State.

Method

Research Design

The study adopted the descriptive survey research design to ascertain the opinions of male and female as regards the influence of ICT on business educators' job performance delivery in universities in Rivers State.

Population and Sampling Procedure

The population of the study consisted of 98 business educators (50 male lecturers and 48 female lecturers) from three universities in Rivers State. There was no sampling due to the manageable size of the population.

Instrument for Data Collection

A structured questionnaire was used for data collection. A four-point rating scale with response options of Strongly Agree = 4, Agree = 3, Disagree = 2 and Strongly disagree =1 was used based on a respondent's opinion with a total of 20 questionnaire items.

Validation and Reliability of Instrument

The instrument for data collection was validated by three experts, two in business education and one in measurement and evaluation. Necessary corrections and suggestions were made by these experts and was further affected by the authors. Cronbach alpha reliability test was used to determine the internal consistency of the items in the instrument and reliabilities of the instrument which yielded a coefficient value of 0.86.

Method of Data Collection and Analysis

A total of 98 copies of the instrument were distributed and retrieved by the authors with help of two research assistants who were briefed on the data collection procedure. The data collection indicated 100% return rate of the questionnaire. The two research questions were analyzed using mean and standard deviation and t-test was used to test the two null hypotheses at a 0.05 level of significance.

Results

Research Question 1: What are the level of ICT utilization by business educators in delivery of business education courses in universities in Rivers State?

Table 1: Mean and standard deviation on ICT utilization by business educators in delivery of business education courses in universities in Rivers State.

S/N	Items	Male		Female		XG	Remark
		X1	SD1	X2	SD2		
1.	Computer laboratory is in use by business educators for practical lecture	2.96	1.48	3.04	1.76	3.00	Agreed
2.	Use of interactive white board in teaching students	3.14	1.77	3.28	1.81	3.21	Agreed
3.	Multimedia projectors are used in teaching students	3.28	1.81	3.31	1.82	3.30	Agreed
4.	Internet connectivity is properly used to get information	3.16	1.77	3.09	1.76	3.13	Agreed
5.	Digital recorders are used during teaching and learning	2.84	1.68	2.76	1.66	2.80	Agreed
6.	Promoter are used to print documents from the internet system	3.19	1.76	3.31	1.82	3.25	Agreed
7.	Digital cameras are used to gather pictures to aid teaching and learning	3.81	1.95	3.68	1.97	3.85	Agreed
8.	U.P.S is used to aid power supply	3.97	1.98	3.89	1.96	3.90	Agreed
9.	Scanners are properly used	3.91	1.96	3.97	1.98	3.94	Agreed
10.	Level of lecturers use of electronics board grand mean	2.51	2.62	2.63	1.62	2.57	Agreed
Grand Mean		3.28		3.31		3.30	Agreed

Note. X1 = Mean response of male business educators, XD1 = Standard deviation of male business educators, X2 = Mean responses of female business educators, SD2 = Standard deviation of female business educators, N1 = Number of male business educators, N2 = Number of female business educators, XG = Pull mean.

Table 1 reveals that the respondents agreed with all the items, which showed a pull mean rating of 3.29. This means indicated that high level of utilization of modern technology facilities are needed to enhance the performance business educators in the delivery of business education courses in tertiary institutions in Rives state. The pull grand mean of 3.30 testified to that.

Research Hypothesis 1: There is no significance difference between the mean ratings of male and female business educators on ICT utilization in delivery of business education courses in universities in Rivers State.

Table 2: t-test on the difference between the mean ratings of male and female business educators on ICT utilization in delivery of business education courses in universities in Rivers State.

Gender	n	X	SD	df	t-cal	t-crit	Decision
Male	50	3.27	1.80	96	1.16	1.96	Accepted
Female	48	3.32	1.83				

The result in Table 2, reveal that calculated z-value of 1.16 is less than the t-critical value of 1.96 tested at 0.05 level of significance with 96 degree of freedom. The null hypothesis was not rejected. This implies that there is no significant difference between mean responses of male and female lecturers relating to the level of utilization of modern technology facilities in delivery of business education courses in tertiary institution in Rivers state.

Research Question 2: What are the challenges facing the use of ICT on business educators’ job performance delivery in universities in Rivers State?

Table 3: Mean and standard deviation on the challenges facing the use of ICT on business educators’ job performance delivery in universities in Rivers State.

S/N	Items	Male		Female		XG	Decision
		X	SD ₁	X	SD ₂		
11	Lack of computers	2.94	1.73	3.82	1.94	3.82	Agreed
12	Lack of UPS to aid power supply	3.46	1.86	3.18	1.79	3.32	Agreed
13	Inaccessibility to computer laboratories	3.57	1.88	338	1.84	3.84	Agreed
14	Lack of functional printers	3.07	1.75	2.93	1.71	3.00	Agreed
15	Inaccessible to digital cameras	2.93	1.71	2.89	1.70	2.91	Agreed
16	Inaccessibility to Internet	2.78	1.61	2.63	1.62	2.61	Agreed
17	Poor attitude of lecturers towards the use of modern technology tools.	2.73	1.68	2.89	1.70	2.81	Agreed
18	Lack of computers expertise	2.93	1.71	2.83	1.71	2.85	Agreed
19	Inaccessibility to digital records	2.87	1.70	2.82	1.71	2.85	Agreed
	Inaccessibility to projector	2.63	1.62	2.94	1.72	2.78	Agreed
	Grand mean	2.97		3.01		2.99	

Keys: X1 = Mean response of male business educators, XD1 = Standard deviation of male business educators, X2 = Mean responses of female business educators, SD2 = Standard deviation of female business educators, N1 = Number of male business educators, N2 = Number of female business educators, XG = Pull mean.

Table 3; reveals that respondents agreed on items numbers 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20 as agreed hence, their pull means were 3.38, 3.32, 3.48, 3.00, 2.91, 2.61, 2.81, 2.78 respectively. This means that certain challenges faced modern technology on business educators’ performance in the delivery of business education courses in tertiary institutions in Rivers state. Hence, the pull grand mean of 2.99 concords to that.

Research Hypothesis 2: There is no significance difference in the mean ratings of male and female business educators on the challenges facing the use of ICT on business educators’ job performance delivery in universities in Rivers State.

Table 4: t-test on the difference between the mean ratings of male and female business educators on the challenges facing the use of ICT on business educators' job performance delivery in universities in Rivers State.

Gender	n	x	SD	df	t-cal	z-crit	Decision
Male	50	2.96	1.70	96	1.40	1.96	Accepted
Female	48	3.00	1.72				

Result in Table 4; revealed that the calculated t-value of 1.40 is less than the z-critical value of 1.96 with 96 degree of freedom tested at .05 level of significance. The null hypothesis was not rejected. This indicated that a significant difference does not exist in the mean responses of male and female respondents as agreed with respect to the challenges that faced modern technology on business educators' performance in the delivery of business education courses in tertiary Institutions in Rivers State.

Discussion

From the analysis of the study, it was found out that all the respondents agreed with the 10 items relating to research question 1. A pull grand mean value of 2.99 showed that majority of the respondents agreed with the low level of utilization of modern technology facilities on business educators' performance in the delivery of business education courses in tertiary Institution in Rivers state. This finding is in agreement with the finding of Yusuf (2007) who argued that the exposure of lectures to ICT usage depends on proper management of modern technology facilities such as word processor, graphic package, digital cameras, computer, database and spreadsheet, laptop, internet for lecturers to improve on their experiences, the need is however for adequate ICT utilization in University system. The null hypothesis tested at 0.05 level of significance indicated that t-calculated value of 1.16 was less than the t-critical value of 1.96. hence, the null hypothesis was upheld.

The analysis of the study also revealed that there are challenges faced in the area of availability of computer laboratories, inadequate computers in the laboratories, inadequate Uninterrupted Power Supply to aid power supply, insufficient printers and scanner, further, there is low level of accessibility of the facilities by business educators in the computer laboratories and challenges to connectivity. This finding is in line with the findings of Oloko (2020) which revealed that there are major challenges in the area of accessibility and utilization of modern technology facilities in Nigerian tertiary institutions currently. The result of the null hypothesis 2 showed that the calculated t-value of 1.40 was less than the t-critical value of 1.96 Hence, the null hypothesis was upheld. This means that a significant difference does not exist in mean ratings of male and female with respect to the challenges facing ICT utilization on business educators' job performance in universities in Rivers state.

Conclusion

Based on the findings, it was concluded that modern technology facilities are very indispensable in the globalization knowledge for national development. It is imperative that tertiary institutions in Rivers state should ensure effective utilization of modern technology facilities and take care of the challenges facing modern technology in her tertiary institutions in Rivers State. These will help in enhancing business educator's performance for the overall interest of university education system as stated in the National Policy of Education (2015).

Recommendations

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

1. The Rivers State university management should endeavour to encourage business educators to make effective use of ICT whenever teaching and learning is taking place.
2. The Rivers State university management should endeavour to train and retrain business educators on the importance of using ICT for job performance delivery.

Reference

- Adebayo, A.S (2014). *Ten lessons for ICT and education in the developing world in world Bank development indicators world-bank*. New Year 38-43
- Adelaya, S.O. (2014) *Availability and usage of ICT in Rivers State secondary schools*, Unpublished M.Ed. Thesis, University of Jos.
- Adeyemi, S.O (2014) *ICT adoption and information quality in effective university management*. A paper presented on the 30th annual conference of the Nigeria Association for Educational Administration and Planning. Enugu, 3rd – 7th.
- Adeyemo, S. A. (2010). The impact of information and communication technology (ICT) on teaching and learning of physics. *International journal of Education Research and Technology*, 1 (2), 48 – 59.
- Adidu, Z. O. (2022), Restructuring Nigerian higher education system through and communication technology (ICT) driven curriculum. *Journal of World Council for Curriculum and Instruction, Nigeria Chapter*, 3 (1), 7-17.
- Adoni, S. O., & Apanban E. T. (2010) Teacher's recruitment, retention and professional development, a lead paper presented at the 2nd teachers' summit held at the NTI. Kaduna 19th-21 April' 04. *African Journal on the World Economics*. Being a conference on impact of information and communication technology on the global economy in London, University of London.
- Aginam, S.O (2014). *The place of information and communication technology in the twenty-five century*. Unpublished M.Ed. Thesis, University of Science and Technology, Port Harcourt.
- Alabi. H. T. (2015). *ICT, 2013 and distant education in Nigeria: A review of literature and accounts*.
- Ernest, E. M. (2014). *Communication: A vital instrument for goal attainment*. Unpublished seminars papers. Babcock University Ogun State.
- Ezekule, M. T. (2014). Towards effective use of information and technology for teaching Nigerian colleges of education. *Asian Journal of Information and Technology*, 2(5), 21-37.
- Fakeye, A.T. (2015). Information and communication technology (ICT) application in secondary schools and students' academic performance in social studies. *African Research Review*, 6(4), 266-378.
- Federal Republic of Nigeria (200). *National policy on education*, Abuja, FEME press.
- Federal Republic of Nigeria (2006). *Government in action*.
- Hawkens, T. W. (2015). Opportunities and challenges. *International Journal of Africa-American Studies*, 5 (2), 5-18.
- Hillary, K. (2018). Using spreadsheet in teaching and learning of mathematics. *A bibliography. Micro Math*, 21(1), 30-31.
- Ilogu, M.O. (2007). Information and communication in education: Analyzing the Nigerian national policy for information technology. *International Education Journal*, 6 (3), 34-48.
- Jim, E.U. (2019). Utilization of e-learning for effective teaching of vocational education courses in Nigeria tertiary institutions. *Journal of Research in Science and Technology Education*, 4 (1), 41-47.

- Jim, E.U. (2019). ICT skills required of Upata Youth Graduates for effective entrepreneurship practice in Rivers State. *Social Science and Humanities Journal*, 03 (04), 1093-1047.
- Njoku, S. (2006). *ICT and Nigeria teachers. Paper delivered at Teachers Registration Council of Nigeria (TRCN) National Workshop*, Abuja: TRCN, 17-21 October, 2016.
- Ogundele, O.T. (2014). ICT adoption and information quality in effective university management, *Nigeria Journal of Education Administration and Planning*, 6 (2), 11-26.
- Okonkwo, G. T. (2014). *Teacher training: Key to implementation of information and communication and technology in science technology*. In M.A.G. Akale (ed.), proceeding of the 44th Annual Conference of Science Teachers Association of Nigeria 260-267.
- Okwadishu, S.T. (2014). *Perception of lecturers and service teachers towards the use of communication media in teaching pure and applied science related discipline*, 44th Annual STAN Conference Proceedings.
- Olaegbulum, A.C. (2015). A survey of internet access in large public universities in Rivers State. *International Journal of Education and Development using ICT*, 2 (3), 86-105.
- Oloko, O.O (2014). Using information and communication technology in secondary schools in Nigeria: Problems and prospects. *Education Technology & Society*, 8 (1), 104-112.
- Oloko, O.O. (2020). Information communication technology: A tools for effective management in Nigeria universities. *Journal on Educational Research*, 3 (2), 12-30.
- Onuma, N (2007). *Utilization of information and communication technology and human resource development in school: Problems suggestions*. Abuja: university of Abuja Press.
- Onyieke, V.C., & Osaat, S.D. (2010) Information and communication technology and human resource development in higher education: Trends in educational studies (TRES), *Journal of the Institute of Education*, 5 (1&2), 23-35.
- Pelgrum, S.T. (2013). *Case studies in 21st century school administration: Addressing challenges of education leadership*. UDA: Sage Publications Inc. Retrieved on 15th October, 2013.
- Rogers, E. M. (1962). *Diffusion of innovation (1st Ed.)*. New York: Free Press of Glencoe.
- Starri, T.O. (2014). *Utilization of internet and good attainment of tertiary education*. Enugu: Forth Dimensions.
- UNESCO (2008). *ICT Competency standards for teachers-implementation guidelines, version 1.0*. retrieved from <http://www.unesco.org/en/competency-standards-teachers>.
- UNESCO (2009). *Guide to measuring information and communication technologies (ICT) in education*. Canada: UNESCO Institute of Statistics.
- Voogt, J., & Knezek, G. (2008). *International handbook of information technology in primary & secondary education*. New York: Springer.
- Williams, V. (2007). *The new face of information and communication technologies*. California: Macford Press.
- Youssef, B.A. & Dahmani M. (2010). *The impact of ICTs' on students' performance in higher education: Direct effects and organizational change* Pd-mh.uvt.rnu.tn/45/1/Benyoussef.pdf.
- Yusuf, M. O. (2007). Information and communication in education (ICT) in Nigerian tertiary education): The African Symposium. An online *Journal of African Education Research Network*, 5 (2), 43-50