

LEARNERS' ATTITUDE TOWARDS THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) AS A MODE OF INSTRUCTION IN OPEN AND CONVENTIONAL UNIVERSITIES

JIMOH, Fatai, O¹. & GAMBARI, Amosa Isiaka²

¹Centre for Preliminary & Extra-Moral Studies

²Department of Science Education,
Federal University of Technology, Minna.)

¹E-mail: fatola4god@gmail.com

²E-mail: gambari@futminna.edu.ng

²Phone No: +234-803-689-7955

Abstract

This study examined learners' attitude towards the use of information and communication technology (ICT) as a mode of instruction in open and conventional universities in Nigeria. A research question and null hypothesis guided the study. Descriptive survey method was used. Researcher-made questionnaire was used to elicit responses from both open and conventional universities' students. Random sampling technique was used to select 150 respondents from each category of the university. Chi-square statistical tool was used to test the hypothesis at 0.05 level of significance. Results show that the hypothesis is rejected indicating a significance difference in the attitudes of learners towards the use of ICT as a mode of instruction in open and conventional universities. It was recommended that a policy framework should be designed to prioritize ICT as a tool for lifelong learning at all levels of education.

Keywords: Learners, Attitude, Information & Communication Technology, Universities

Introduction

There is an increasing awareness of the potential benefits derivable from the use of information and communication technology (ICT) in teaching and learning. Since the introduction of ICT in education, schools have been faced with a new social and cultural phenomena that challenge students as well as their teachers in relation to their technical ability, knowledge and expertise in the use of information and communication technology (Silvia, 2005).

Research on ICT in teaching and learning is an important part of the national strategy on education (Hannele, 2003). Hannele stated further that the important aim of ICT in education is that ICT strategies help the whole institution to grow as a community and that ICT must be integrated as a natural element in teaching and learning processes. He concluded that, the usage of ICT in institutions is a long process which not only needs an effective technical infrastructure, but requires psychological and cultural changes in teaching and learning. ICT as a mode of instruction involves some forms of interactivity which may include online interactions between the students and their teachers or peers. While technology is not a panacea for all educational ills, today's technologies are essential tools for students in both open and conventional universities. Possibly for the first time in history, today's students or the so-called "Net Generation" are more adapt at using the tools necessary for acquiring and transmitting knowledge better than adults do. It has become abundantly clear that they adapt quickly to technological changes and feel at ease with new releases of software and hardware (Kirschner & Daris, 2003).

The feasible application of ICT as a mode of instruction in universities worldwide and Nigeria in particular is generally gaining recognition as a result of great importance and educational appropriateness it offers. Hence, this study focuses on the attitude of learners towards the use of ICT as a mode of instruction in open and conventional universities in Nigeria. Attitude means the way people think or feel about something while mode simply means a particular way of doing something (Hornsby, 2001). Instruction is defined as detail information on how to do or

use something while ICT is a means of accessing and receiving, connecting, storing, retrieval and transmission of data or information (Hornsby, 2001). Open university refers to an institution at the highest level of education which is flexible, affordable and available to a large number of people using e-learning method with little or no teacher-learner interaction.

Conventional university is an institution at the highest level of education where one can study for a degree programme through a generally accepted format (traditional method) with much emphasis on teacher-learner interaction (Hornsby, 2001). The role of ICT in modern teaching and learning is rapidly becoming one of the most important and widely discussed issues in contemporary education policy. Most experts in the field of education agreed that, when properly used, information and communication technology holds great benefits to improve teaching and learning in Nigerian's educational establishments (Uthman, 2009).

The key roles ICT play in enhancing learning activity include but not limited to the following: Information and communication technology (ICT) offers the potential to meet the learning needs of individual students; promote equality of opportunity; offer high-quality course materials and increase independence and self-efficacy among students of all ages (Selinger, 2003).

In fact, ICT as a mode of instruction has more impacts on students, as it is changing the learning experience of the students as well as providing easier access to information such as CD-ROMs, online journals, e-books and others. For instance, use of e-books with greater course standardization facilitates increased peer and automated learning. In a nutshell such e-provisions lower travel and accommodation costs. ICT as an important tool for learning and instruction encourages collaborative work, enquiry and decision-making among the students (Donald & Nicholas, 2005). The recent trends in information and communication technology enhance and support learning in tertiary institutions especially when courses are offered fully online. It serves as a useful tool to embracing learners of all ages, linking and networking them together from one town to another city or country (Dorothy & Jennifer, 2005). ICT is not only an essential tool for students in their daily work; it also offers them opportunities for their own professional development.

The world at large recognizes a range of benefits from the use of ICT as a mode of delivery, for example, in providing additional information, aiding presentation and the motivational elements of ICT (Dorothy & Jennifer, 2005). The knowledge of ICT in schools can produce young Nigerians that can change the developmental pace of the country, (Patrick, 2013). Although, computers entered into Nigerian educational system in the early 80's, no concrete policy was formulated for its entry into the nation's school system until the evolvement of the National Policy on Computer Education in 1988 (Yusuf, 2007). The document, according to Federal Republic of Nigeria (1988) contained information on the application of computer at various levels of the country's educational system. Another policy document on ICT was launched in 2001 and was named National Policy on Information Technology (FRN, 2001) with the title "USE IT". This document is a good step in the right direction but it is inadequate to impact positively on the Nigerian education as its philosophical framework is market-driven places and its little emphasis on real integration of ICT in the nation's education system (Yusuf, 2005).

Statement of the Problem

It is a truism that the wealth or poverty level of any nation depends on the quality of her higher education system. To say that 21st century is being driven by information and communication technology (ICT) is an understatement, in fact the world today breathes and thrives on ICT. Its applications in almost every facet of our modern life has made it a second nature to man. One of the national goals of the educational service in Nigeria is to make learning more meaningful for learners (FRN, 2004). The Federal Republic of Nigeria recognizes information and communication technology (ICT) as strategic imperative for national development (Nigeria National Policy for Information Technology, 2001). This study therefore seeks to investigate the learners' attitude towards the use of ICT as a mode of instruction in open and conventional universities in Nigeria.

This will enable her to produce skillful and knowledgeable individuals that can tackle the global information and communication challenges. To this effect, a policy document on ICT was launched in 1988 (Yusuf, 2007). The national policy on Computer Education (FRN, 1988) contained information on the applications of computer at various levels of the country's education system. The National Policy on Information and Communication Technology (FRN, 2001), stressed the applications of ICT in every sectors of our national life for instances in education, agriculture, aviation, health, defence and many others.

For this reason, this research work seeks to find out the differences between the learners' attitude towards introduction of ICT as a mode of instruction in Nigeria's conventional and open universities in order for her to produce citizens that can meet up with the global information and communication challenges.

Research Question

The following research question is formulated to guide the study:

- (i) Is there any difference in learners' attitude towards the use of ICT as a mode of instruction in open and conventional universities?

Hypothesis

- (i) There is no significant difference in learners' attitude towards the use of ICT as a mode of instruction in open and conventional universities.

Methodology

A descriptive survey type was used in carrying out this study. The target population of the study was all the students in open and conventional universities in Niger State, namely, Federal University of Technology (FUT), Minna, Ibrahim Badamosi Babangida University (IBBU), Lapai and National Open University of Nigeria (NOUN), Minna Study Centre. Simple random sampling technique was used to select 150 students from each of conventional and open universities giving a sample of 300 students.

A questionnaire titled "attitude towards ICT as a mode of instruction" was constructed by the researcher and it was validated by senior lecturers in Federal University of Technology Minna. This questionnaire has three sections namely, the introduction and instruction, the personal data and the items which are made up of eighteen statements to elicit responses from the respondents. The items are in the four point Likert format of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). Each was scored 5, 4, 3, and 2 points respectively. The number of respondents and the percentages they represented were analyzed and this made it possible to infer the pattern discernable on the tables by using chi-square statistical analysis. The chi-square test statistics is $\chi^2 (i-1) (j-1); 0.05$, that is chi-square at 1 degree of freedom and 0.05 level of significance.

Results

Ho: There is no significant difference in learners' attitude towards the use of ICT as a mode of instruction in open and conventional universities.

Table1: Chi-square statistical analysis of learners' attitude towards the use of ICT as mode of instruction in open and conventional universities.

University	Agree	Disagree	χ^2 Calculated value	χ^2 Critical value	Decision at $p \leq 0.05$
Conventional	93.50 (90.58)	56.50 (59.42)	0.4741	0.0039	S
Open	87.66 (90.58)	62.33 (59.42)			
Total	181.16	118.84			

S: Significant at $p \leq 0.05$ Alpha Level

The chi-square statistical tool was used to test the null hypothesis. From above, χ^2 calculated is 0.4741 while χ^2 table is 0.0039, since the χ^2 calculated is greater than the χ^2 table, the null hypothesis that there is no significant difference in learners' attitude towards the use of ICT as a mode of instruction in open and conventional universities is therefore rejected.

Discussion

The findings of this study showed that students in open and conventional universities have varied attitude towards the usage of ICT as a mode of instruction. This is evidenced from the Table above where the observed mean score of Agree observed responses for conventional university is 93.50 while that of Open University is 87.66 respectively. It is equally revealed from the Table that learners attitude were varied because about 93.50% of the total respondents in conventional university agreed with the hypothesis while 87.66% of the respondents in Open University agreed with the hypothesis. However, 56.50% of the observed respondents in conventional university disagreed with the hypothesis and similarly, 62.33% of the observed responses in Open University disagreed with the null hypothesis.

The data analysis shows that χ^2 calculated values are greater than the critical value of 3.841 at 1 degree of freedom and 0.05 level of significance. The use of 0.05 level of significance connotes 95 percent reliability of chi-square statistical test.

This means there is a difference in the attitude of learners towards the use of ICT as a mode of instruction in open and conventional universities. There is an indication that students in open university show positive attitude towards ICT as a mode of instruction than their counterparts in conventional universities. This was corroborated by Ihebereme & Onwuagboke (2010), who posited that in open education programme, teacher-student instruction is not permitted except on an agreed meeting for discussion once a while. This assertion informs the visualization of open education as a teaching/learning programme in which the students are physically separated from their teachers while learning is done through electronic media.

The findings of this study are in line with that of Yoloye (1990) who found that learners at University of Ibadan have positive perception and attitude towards computer. Similarly, Yusuf (2005) opined that most teachers in Nigeria schools have positive attitude towards computer education. This study reveals that open university students interact with computers regularly than their colleagues in conventional universities because teaching and learning activities are mostly done online, examples include e-test, e-assignment, e-examination, e-reading, e-learning and many others. Ihebereme and Onwuagboke (2010) remarked that open education students used to troop in and out of cyber café for e-assignment or downloading of materials. So, therefore, ICT should be embedded in every day practices of students in other universities in Nigeria.

Recommendations

Based on the findings of this investigation, the following recommendations are hereby given which, if considered could improve the attitude of the learners towards ICT as a mode of instruction:

- (i) ICT should be embedded in every day practices of students in conventional universities to improve their attitude towards information and communication technology.
- (ii) For students to be e-confident, a policy framework should be designed to prioritize ICT as a tool for lifelong learning at all levels of education so as to develop students' interest at early stage.
- (iii) Government at all levels, non-governmental organizations and other stakeholders should assist universities in providing ICT infrastructures and equipments.

- (iv) ICT should feature prominently in the strategic plans and mission statements of all Nigeria universities.

Conclusion

This paper has described the varied attitude of learners in open and conventional universities towards the use of ICT as a mode of instruction. The author therefore calls for integration of ICT as a mode of instruction in open and conventional universities in Nigeria. It is notable that all the students interviewed were from public universities and yet majority of them lacked basic computer knowledge. This scenario should give us a national concern.

Government needs to create a special fund to develop an ICT competency framework for university students and staff. This is because, ICT can play a much greater role in course delivery and assessment, access to resources, communications and other activities undertaken in schools.

References

- Donald, G. & Nicholas, S. (2005). *Secondary science teachers' use of and attitudes towards ICT*. OECD Publications.
- Dorothy, W. & Jennifer, K. (2005). *Teachers, ICT skills and knowledge need*. OECD Publications.
- Federal Republic of Nigeria (2001). *Nigerian national policy for information technology*. Retrieved December 5th, 2005 from <http://www.nitda.gov/docs/policy/ngitpolicy>.
- Federal Republic of Nigeria (2004). *Report on national policy on computer education*. Lagos: National Committee on Computer Education.
- Hannele, N. (2003). Information and communication technology in teacher education technology. *Pedagogy & Education*, 12 (1), 85-101.
- Hornsby, A. S. (2001). *Oxford advanced learners dictionary of contemporary English*. Oxford: Oxford University Press, Seventh Edition.
- Ihebereme, I. C. & Onwuagboke, B. B .C (2010). Emphasizing the use of information and communication technology among students in open and distance education programmes. *Journal of Educational Media and Technology*. 14(1), 25-36.
- Kirschner, P. & Sellinger, M. (2003). The state of affairs of teacher education with respect to information and communications technology. *Technology, Pedagogy and Education*. 12(1), 87-96.
- Kirschner, P. A. & Daris, N. E. (2003). Pedagogy benchmarks for information and communication technology in teacher education. *Technology, Pedagogy and Education* 12(1), 9-19.
- Patrick, K. (2013). ICT and Youths Development. A paper presentation. *Daily Trust*, 5(27),14-25.
- Selinger, M. (2003). A comparison of the influence of government policy on ICT for teacher training in England and northern Ireland. *Technology, Pedagogy and Education*, 12(1), 92-101.

- Silvia, F. (2005). *Two generations of teachers differences in attitude towards ICT, e-learning in tertiary education*. OECD Publications.
- Usman, K. (2008). *Factors influencing effective teaching and learning of computer in selected private secondary schools*. Kaduna: NTI Kaduna.
- Uthman, K. (2009). *An Evaluation of Attitude of Secondary School Teachers towards Integration of Information and Communication Technology into Teaching*. Kaduna: NTI, Kaduna.
- Yoloye, V. O. (1990). Use and perception of computers by educationists at the University of Ibadan. *Ilorin Journal of Education*, 10(2), 32-43.
- Yusuf, M. O. (2005). Information and communication technology and education. Analyzing the Nigerian national policy for information technology. *International Education Journal*, 6(3), 316-321. Retrieved on the 18th September, 2010 from <http://ehlt.flinders.edu.au/education/iej/articles/v6n3/v6n3.pdf>
- Yusuf, M. O. (2007). Information and communication technology in the Nigerian early childhood and primary education. *The African Symposium: An Online Journal of African Educational Research Network*, 7(1), 107 – 113. Online at <http://www.ncsu.edu/aern/TAS7.1/TAS7.1.pdf>