
AN ASSESSMENT OF THE USE OF ICTs TOOLS BY STUDENTS TO STUDY EDUCATIONAL TECHNOLOGY IN NIGER STATE COLLEGE OF EDUCATION MINNA

By

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Abstract

The paper on the assessment of the use of ICT tools by students to study educational technology in Niger state college of education Minna was carried out to find out the ICTs resources that are available and accessible to educational technology students in Niger state college of Education. The study was also to determine the factors responsible for students not using ICT in their school. The design adopted to gather information in this study was survey design. 85 educational technology students in 200 level were used. A structured questionnaire comprising of four sections based on the research questions was also adopted. Percentages were used to answer research questions one and two, while the mean was used to answer research

INTRODUCTION

Educational technology (ET) is considered as the process of solving instructional problems. It consists of the use of audiovisual equipment (hardware and software) for the solution of problems in education. Educational technology involves the development of learning experiences through the

questions three and four. The data collected were analyzed. The result revealed that not all ICTs resources are available and those available are not accessible to students except computer, internet printer and browser phones. The mean factors affecting the use of ICT by students include poor electricity, inadequate resources and limited time. This explains why students cannot use ICT for their studies even though they have the interest and knowledge on what to use and how to use them. Recommendations were made among which is that efforts should be made by the administrators concern to make the necessary ICT resources available and accessible to students so that they can develop more interest in the study of educational technology.

scientific method of learning. (Educational technology is therefore "not just the use of the tools of technology such as over-heads projectors, films, television and computers to solve education problem, but also a systematic integrated organization of machines (hardware and

software) and main educational Administrators, psychologists, teachers) etc. to the solution of problems in education Ahmed (2007).

Educational technology as a new application to education can be viewed from two broad perspectives. One, as the application of media borne out of the communication revolution through the production and use of quite a wide range and variety of electronic information carriers, projection and amplification.

By this, it may be regarded as "tools technology" with emphasis on hardware or equipment related materials. Two, it could signify an analytical procedure for organizing and managing instruction. The procedure is characterized by the identification of an instructional problem, collection of relevant information about the problem, setting of objectives, design of learning experiences, selection of needed resources such as people, material, facilities, tools and so on. Implementation of the designed learning experiences and evaluation of the outcomes of instruction (Demion 2001).

Three of the terms mostly commonly used in discussing the field represent three different approaches to education technology. These terms are hardware, software and system approach. The hardware approach views educational technology as a means of mechanizing or automating the process of teaching with devices that transmit, amplify, distribute, record and reproduce stimulus materials. This approach is referred to as traditional approach to educational technology with emphasis

on equipment such as projectors, tape recorders, cameras, video players/recorders, photocopying machines, radio and television sets and so on. This approach is generally believed to be a direct application of the physical science to the problem of education.

Information and communication technologies (ICTs) are information handling tools that used produced, stored and process, distribute and exchange information John (2006) He also stressed that ICTs can be used to access global knowledge and communication with other complex topics and concepts and are more likely to recall information and use it solve problems outside the classroom. In addition, through ICT, students extend and deepen their knowledge of investigation and inquiry according to their need and interest when accessed to information that is available in multiple levels. Alexis (2009) identified different types of technology that can be used to support and enhance learning. This includes video players, laptops computing and had held technologies, word processing and e-mail promote communication skills, database and spreadsheet programmes promote organizational skills and so on.

Jude (2007) stated that asserts such as cell phones that many people move about with can be useful to learn. ICT resources when used can empower students learning by enabling them improve their class work by taking notes on the computer, or by sending homework e-mail to the teacher from

home, or by word processing their homework.

Many reasons have been advanced for poor academic performance of students generally which has led to poor enrolment of students into various higher institution including colleges of education and the universities to study educational technology. One of the problems the study of educational technology is facing ranges from the abstracts nature of the course which is said to be fully technical Danto (2010). He went further to say that educational technology is very difficult to understand because of its technical nature and technological tolls involved.

College of education Minna is as old as other colleges of education. It is gathered by the researcher that most students studying educational technology did not actually apply to study educational technology, but other courses. They may lack interest in this subject, but with the use of ICT, the student can enjoy educational technology as a course and overcome the difficulties faced in studying such course. The use of ICT will not be easy for the students unless the college assists by providing the resources to the students. The federal government of Nigeria has encouraged the use of ICT in her institution of higher learning in the National policy of education and the policy encouraged the use of ICT which the policy stated in section 4(m).

In recognition of prominent role of information and communication technology in advancing knowledge and skills necessary for effective functioning

in modern world, there is urgent need to integrated information and communication technology (ICT) into

colleges of education in Nigeria. The federal Government in the policy encouraged that each institution should explore other sources of funding such as endowments, consultancy services and commercial ventures. Kaduna State University though new has made efforts to that direction to establish its own ICT driven projects and programmes. Recently some of the staff had opportunity to travel to India for workshop on the integration of ICT in their teaching though specifically in the sciences, it is hoped that other subjects in the arts shall follow suit. In a study conducted on ICT literacy among NCE graduates in Nigeria colleges of education discovered that internet, computer and telephone were the ICT mostly used by NCE graduates although more on occasional basis. The study further discovered that major factors affecting the use of ICT were irregular power supply, inadequate ICT and limited time for ICT use. The use ICT by the students will depend on their knowledge, belief and attitude towards the use of ICT. Ahmed (2009) noted that students who like ICT and belief that it is capable of helping their pedagogical objectives in the classroom can easily integrate the use of ICT into their classroom learning. While those who don't belief in ICT, ignore is integration

in their learning. This study therefore will specifically find out whether ICT Resources are available and accessible for the students in college of education Minna.

Research Questions

To achieve the stated objective of the study, the following research questions will be answered.

1. What are the available ICTs resources for students' use in college of education Minna.
2. How accessible are these resources to students?
3. How often do students use ICT resource for their studies?
4. What are the factors affecting the effective uses of ICTs resource?

Methodology

This study is a descriptive survey design. This method allows the researcher to have a vivid description of how educational technology students in

college of education Minna use ICT for their studies.

The populations of the study comprised 85 educational technology students in 200 level in department of educational technology, this is because they have studies educational technology for at least one year in the school; they will be in a better position in providing the adequate information needed for this study.

The instrument is a structured questionnaire by the researcher based on information gathered from the literature on different types of ICT Resources. The instrument administration was carried out by the researcher during their lectures and was collected the same day. The data collected on the study was analyzed using frequency count and percentages for questions 1 and 2. The mean statistic was used to answer research questions 3 and 4.

Results.

The result of the data collected is presented based on the responses of the respondents on the available and accessibility of ICT resources and factors responsible for use or lack of use of ICT resources.

Table 1: Percentage of student's responses on the Availability of ICT Resources

S/No	ICTs Resources	Available Frequency %		Not Available Frequency %		Result
1	Computers	54	63.5	31	36.5	Available
2	E-mail	54	63.5	31	36.5	Available
3	Internet	59	69.4	26	30.6	Available
4	Digital Camera	31	36.5	54	63.5	Not Available
5	Scanner	32	37.6	53	62.4	Not Available
6	Video equipment	30	35.3	55	64.7	Not Available
7	Data processor	40	47.1	45	52.9	Not Available
8	Printer	45	52.9	40	47.1	Available
9	Browser phones	56	65.9	29	34.1	Available

The result in Table 1 showed that some of the ICTs resources such as computers, e-mail, internet and browser phones available as indicated in items 1, 2, 3,

8, and 9 while the rest such as digital camera, scanner, video equipment, and data processor are not available as indicated in items 4, 5, 6, and 7

Table 2: Percentage of Students' Resources on their Accessible to ICT Resources

S/No	ICTs Resources	Available Frequency %		Available Frequency %		Result
1	Computers	39	45.9	46	54.1	Not accessible
2	E-mail	38	44.7	47	52.3	Not accessible
3	Internet	47	52.3	38	44.7	Accessible
4	Digital Camera	24	28.2	61	71.8	Not accessible
5	Scanner	24	28.2	61	71.8	Not accessible
6	Video equipment	19	28.4	66	77.6	Not accessible
7	Data processor	24	28.2	61	71.8	Not accessible
8	Printer	30	35.3	55	64.7	Not accessible
9	Browser phones	47	52.3	38	44.7	Accessible

The data in Table 2 revealed that the respondents have access to internet and browser phones only as item 3 and 9

indicate. Other ICT resources in the table are not accessible to the respondents are indicated in items 1, 2, 4, 5, 6, 7 and 8.

Table 3: Frequency of the use of ICT Resources

S/ No	ICTs Resources	Percentage/Number of Respondents			
		Once a week N = 85	Twice a week N = 85	Daily N = 85	Occasionally N = 85
1	Computers	16%(14)	13%(11)	51%(43)	20%(17)
2	E-mail	15%(13)	35%(30)	30%(25)	20%(17)
3	Internet	16%(13)	15%(12)	50%(43)	20%(17)
4	Digital Camera	65%(55)	11%(9)	10%(8)	15%(13)
5	Scanner	73%(62)	18%(16)	4%(3)	5%(4)
6	Video equipment	90%(77)	5%(4)	1%(1)	4%(3)
7	Data processor	10%(8)	15%(13)	70%(60)	5%(4)
8	Printer	15%(13)	35%(30)	30%(25)	20%(17)
9	Browser phones	5%(4)	7%(6)	80%(68)	8%(7)

The data in Table 3 show that the respondent used computers, internet, data processor and answer phones more than other resources. This could be as a

result of the availability of these resources all around the campus and more of the respondents have their own browser phones.

Table 4: Means Responses on Factors Affecting the Utilization of ICT

S/No	Statements	SA	A	D	SD	n	x	Decision
1	Students lack expertise with ICT	08	21	18	38	85	1.98	Disagree
2	Students lack confidence in using ICT	11	14	21	39	85	1.91	Disagree
3	Students lack knowledge of appropriate software	09	20	20	36	85	2.02	Disagree
4	Students lack of how to use equipment	10	19	18	40	85	2.03	Disagree
5	Students lack knowledge on the importance of ICT learning	15	16	10	44	85	2.09	Disagree
6	The use of ICT is very difficult	6	09	20	50	85	1.65	Disagree
7	Poor electricity supply	28	24	18	15	85	2.76	Agree
8	Using ICT is not interesting	11	03	23	48	85	1.72	Disagree
9	Inadequate ICT resources	32	16	19	18	85	2.72	Agree
10	Lack of sufficient time	38	15	18	14	85	2.90	Agree
11	Using ICT makes history more difficult	06	05	21	53	85	1.57	Disagree
12	ICT reduces students motivation to study history	10	04	19	52	85	1.67	Disagree

The result in Table 4 showed that the respondents disagree with items 1, 2, 3, 4, 5, 6, 8, 11 and 12, but agree with items 7, 9 and 10. This means that the students are capable of using ICTs resources and have knowledge on what to use and how to use ICT. The students also know the importance of ICT. The problem is lack of availability and accessibility to ICT resources; poor electricity supply and sufficient time.

Summary of Findings

Based on the data collected of this research is follows:

1. Some ICT resources such as computer, e-mail, internet and browser phones are available to students I college of education Minna

2. ICT resources such as computer, e-mail, digital camera, video equipment, data processor and printer are not accessible to the students.
3. The ICT resources that used mostly by students are computer, internet, data processor and browser phones.
4. Main factor responsible for effective utilization of ICT include lack of availability, poor power supply and sufficient time.

Discussion

The result presented in Table 1 4 showed that educational technology students in college of education Minna have knowledge on the use of ICT and the students' belief that ICT can motivate them in their study of educational technology. The problem is on the availability of the resources. Some of the resources available like digital camera, scanner, video equipment, data processor are not accessible. David (2008) has earlier noted that available ICT resources cannot be used if they are not accessible. In this age of technology advancement, students are more eager to use any ICT resources within their reach. The result of the findings agree with the study carried out by Adetirin (2011) that the factors affecting students' used of ICT include, poor power supply; insufficient time and inadequate resources. The computer, internet and the browser phones are within students' reach because they

can own their computer with any internet accessory and phones. Even when they don't have one, they can pay for airtime and use them. Other resources that should be provided are not there and that could affect students' information retrieval and processing. This means that students will have to do the best they can to study history if not, they will be discourage and the lesson will be boring and the problems that are threatening history will continue to discourage others by giving them the impression that history is a very difficult subject.

Recommendations

Based on the result and discussion above, the following recommendations were made.

1. College education, Minna and other state colleges of education should make efforts, to ensure that ICT resources are available and accessible to the students.
2. Efforts should be made by Niger state college of education to revive the study of educational technology in Nigeria by encouraging students to effectively use ICT to study educational technology.
3. Lecturers should be encouraged to use ICT to teach other subjects so that students will be encouraged to use more ICT in their studies.

Conclusion

Educational technology is very relevant in the development of any nation. Lack of knowledge of technology skills acquisition will be like people and living in the dark. Knowledge of the people's ways of life will help them to plan for the future and can help the people be able to live together and tolerate one another. The use of ICT helps to change the way students learn and process information.

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