

INTEGRATION OF ICT IN THE TEACHING/LEARNING OF ECONOMICS IN SENIOR SECONDARY SCHOOLS

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Abstract

This paper focused on the integration of ICT in teaching/learning of economics in senior secondary schools. The study employed the descriptive survey design. The area of the study was Umuahia Education zone, Abia State. Two hundred and fifty secondary school students formed the sample used for the study. The instrument used for data collection was a self-developed structured questionnaire. The instrument was validated for relevance, suitability and clarity. The instrument was also subjected to test the reliability of the instrument was determined using Cronbach Alpha in order to ascertain the internal consistency of the instrument which yielded a reliability coefficient of 0.98. Three research questions were formulated to guide the study. The research questions were answered using the mean and standard deviation. The findings of the study revealed that the facilities for the integration of ICT in the teaching /learning of economics were not readily available. It was also discovered that most economics teachers lack the competency to fully integrate ICT in the teaching/learning of economics at the senior secondary school level, and finally, that some of the challenges faced by most economics teachers in integrating ICT include; lack computer application skill, inability of economics teachers to access information from the internet, poor electricity supply among others. The paper was concluded with some recommendation which include that government should increase the budgetary allocation to schools in order to enable them to procure the necessary ICT facilities for the integration of ICT in teaching and learning of economics in schools and the employment of ICT experts to assist in the development of programme and software applications in pedagogy.

1. Introduction

There have been a global revolution, and the new generation are more good with the use of computer as they learn and manipulate it very easily. Therefore, there is a need to follow the new trend of doing things. If the purpose of education is to produce highly skilled manpower, which can stand the ever-changing modern world, there is a need to improve our traditional way of teaching i.e. Chalk and talk method by introducing Information and Communication Technology (ICT) in our teaching and learning process.

In other for the teaching of economics to be more participatory and interactive, and also to encourage long-lasting retentive memory, there is a need for teachers of economics to improve the quality of their skills as well as their lesson delivery with the integration of ICT as an instructional strategy to improve the learning outcome of their students. Thus, there is a need to integrate information and communication technology (ICT) in enhancing the teaching/learning of economics in senior secondary schools in Umuahia Education zone, Abia State.

Information and communication technology has been recognized by the Federal Government as a veritable tool for sustainable development and global competitiveness. The Federal Government of Nigeria began the implementation of the ICT policy in April, 2001 (Federal Republic of Nigeria, FRN,2013). Today, ICT has become an integral part of education in many part of the globe and Nigeria is not left out. The role of technology in teaching and learning is rapidly becoming one of the most important and widely discussed issue in contemporary educational policy (Rosen & Michelle 1995; Thierer, 2000). Most experts in the field of education agreed that, when properly used, information communication and technology holds great promise to improve teaching and learning in addition to shaping workforce opportunities.

Poole (1996) asserted that computer illiteracy is now regarded as the new illiteracy. This has made most schools showed a new and strong desire to equip schools with computer facilities and qualified personnel necessary to produce technologically proficient and efficient students in developed countries of the world. There is no doubt that computer can aid the instructional process and facilitate students' learning. Many studies have found positive effect associated with technology aided instruction (Burnett, 1994; Fitzzyerald & Warner, 1996).

Over the past two decades, information technology (IT) has broadened to become information communication and technology (ICT) and has become better established within schools (Abbott, 2001). Many claims have been made about its potential contributions to pupils learning (Patchler, 1999). Also, official rhetoric has presented it as set to 'transform education' (Blair, 1997). Much current policy and practice reflect a technocratic determinism in which technology is seen unproblematic as providing relatively immediate tools for teachers and students and its use primarily for development of technical skills.

Research has demonstrated that from an early age young people are capable of insightful and constructive analysis of their experience of learning in school and are able to comment on teaching approaches and context that are helpful in their learning (Brown and McIntyre, 1993; Harris 1995; McCallum, 2000; Rudduck and Flutter, 2000). Similarly, students are seen as active participants in shaping social and educational process rather than viewed as passive recipients of them (Pollard & Tann, 1993).

The term ICT was born in the era of the internet revolution and encompasses telecommunications, computer network, the internet, radio and television (International telecommunication union, 2007). Information and communication technologies are used by people to seek information and to communicate it to those who appreciate its values, therefore

with its great importance and value, there is need to integrate (ICT) with the teaching and learning of economics to enhance better understanding of the content areas of the subject. As technology serves as a channel to disseminate knowledge.

Ololube (2006), Oyideko, and Adeyilka (2010) asserted that the use of information and communication technology promotes effective learning among students and in turn improves the performance of the products. But they further affirmed that the challenge to this laudable objective of ICT is the inability of teachers to access information on the internet and apply them for teaching. In line with the above statement, Nworgu (2001) submitted the following; the personnel normally entrusted with the responsibility of training/teaching students on the utilisation of information and communication technology are poorly equipped with the basic and necessary skills needed for the realisation of the set objectives. He added that about 60% of the teachers teaching economics in secondary schools in both urban and rural areas in Nigeria do not have e-mails and most times are computer ignorant.

Under the new National Policy on Education (9-3-4), Economics as a subject is considered as one of the elective subjects to be studied at the senior secondary school level (FRN, 2014). Economics as a subject was introduced into the Nigerian secondary school curriculum in the year 1967, where it was recorded that only about 10 candidates registered for the subject in Senior Secondary School Certificate Examination (SSCE). At present, more candidates are registering and sitting for the examination because of its importance to the Nigerian economy (Odunsanya, 2001). Economics is a science subject which studies human behavior as a relationship between ends and scarce means which have alternative uses, (Robbins in Aderinto & Abdullahi 2009).

Economics is a subject that has gained interest among all students and it is offered at the senior secondary school level by Science, Arts and Commercial students. Due to the technicalities of the Economics curriculum, the subject is being offered only by "mature minds" starting at the senior secondary school level. Economics is an exciting and intellectual adventure that inspires young people and expands the frontiers of their knowledge about how best to use limited resources with minimal waste. The subject therefore provides a rational guide to individuals, firms and governments in the allocation of scarce resources (Anyawucha, 2010).

Due to scarce resources and limited supply, economics is said to be the solution as it studies the prudent use of scarce resources. Scarcity presents the problem of how to allocate the available resources? How to make choices among limited alternatives? Therefore, the West African Examination Council (WAEC) syllabus (2008) stated the aims and objectives of economics at the secondary school level as follows;

- i. To provide the knowledge of structure and functioning of economic institutions, commercial, industrial and financial.
- ii. Understanding the basic economic principles, concept and tools for economic analysis
- iii. To prepare student for higher education in the field of economics.
- iv. How to manage available resources
- v. Ability to follow the role and status of West African countries encounter in their economic development.

Over the years, there have been less interest and a decline in students performance in the subject. Oleabhiele, (2012) asserted that students in secondary schools loose interest either totally or partially in economics subject due to bad

impression they have about economics. He also pointed out that some of them have the notion that economics is a difficult subject and such will not take up a career involving economics in the future. He went further to state that there were not enough skilled teachers to take up the challenges of teaching mathematical aspect in economics in schools and therefore appealed to the entire public to note that economics is a good subject and that the integration of ICT will help to simplify the teaching/learning of the subject.

In educational context, students are heterogeneous in terms of aptitudes, prerequisite knowledge, motivation, experience and learning styles. Many problems in economics courses are brought about by heterogeneity among students (Bach, 1990). Hence, economics teachers are faced with the fundamental dilemma of where to pitch their lesson, if the lessons are pitched too high, the weaker students become hopelessly lost in the course. If the lessons are pitched too low, the brighter students are turned off as the course fails to stimulate them intellectually (Lage, Platt, & Treglia, 2000).

Therefore, for better understanding of subject matter there is a need to integrate information communication and technology (ICT) as a tool to enhance the teaching/learning of economics at the senior secondary school level, because the strategy provides the opportunity for the learners to learn at their own pace and pave way for individual differences.

1.2 The Purpose of the study

The main purpose of the study is to examine how the integration of ICT will enhance the teaching and learning of economics in schools in Abia State.

Specifically, the study sought to;

- 1 Ascertain the availability of ICT facilities in schools for effective teaching and learning of economics?
- 2 Ascertain the competency level of economics teachers in the utilisation of ICT for the teaching and learning of economics in schools?
- 3 Find out the challenges faced by economics teachers in the integration of ICT in teaching and learning of economics in schools?

1.3 Research Questions

The following research questions were raised to guide the study

- 1 What are the ICT facilities available for the effective teaching and learning of economics in schools
- 2 What are the competency level of economics teachers in the use of ICT for the teaching and learning of economics in schools
- 3 What are the challenges faced by economics teachers in the use of ICT in teaching and learning of economics in schools

2. Methodology

The study adopted the descriptive survey design. This design was used in order to sample opinions of economics teachers on the integration of ICT in the teaching and learning of economics in schools. The main instrument used for the collection of data was the questionnaire, which was titled "Integration of ICT in the teaching and learning of Economics' (IITLE). The instrument was sub-divided into two sections A and B. Section A, sought information on the bio-data of the respondents such as the name of the school, area of specialisation, while section B comprised of series of questions drawn to provide answers to the research questions formulated to guide the study.

The mean scores was used for decision making. A mean score of 2.5 and above were accepted while below 2.5 were rejected. The four point rating scale was used in rating the opinion of the respondents. Thus, Strongly Agree (SA) 4points, Agree (A) 3points, Disagree (D) 2points and Strongly Disagree (SD) 1 point.

The population of the study was all the economics teachers in all the sampled senior secondary schools. The sample for the study consisted of forty-five (45) economics teachers who correctly completed and returned their questionnaire. The instrument (IITLE) was subjected to both face and content validation by an specialist in economics education and two specialists in measurement and evaluation from Micheal Okpara University of Agriculture, Umudike, Abia state The face and content validation scrutinized the items in terms of relevance, general test format, suitability and clarity. After the face and content validation, some modifications were made based on the recommendations by the experts. The reliability of the instrument was determined using Cronbach Alpha in order to ascertain the internal consistency of the instrument which yielded a reliability coefficient of 0.98

3. Results

The data collected from the respondents were analysed and presented in table below:

3.1 Research Question One

What are the ICT facilities available for the effective teaching and learning of economics in schools?

Table 1: Mean opinions on Availability of ICT facilities for teaching/learning of Economics

S/N	Item focus	X	SD	Decision
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1.	My School does not have computer system.	3.32	0.98	Agreed
2.	My School has no internet connectivity.	2.98	1.05	Agreed
3.	Poor network connectivity in my schoo	2.58	1.01	Agreed
4.	Poor power supply.	3.23	1.12	Agreed
5.	Non-availability of Economics software packages	2.66	0.87	Agreed
6.	Inadequate computer system in schools.	2.76	1.05	Agreed
Pooled Mean score		2.92	1.01	

The result of data analysis presented in table 1 revealed that the respondents expressed their opinions that the facilitates for the integration of ICT in the teaching /learning of economics are not readily available. This finding can be deduced from the average mean score of 2.92 which is greater than the decision rule of 2.50. And all the items raised in table 1above to provide answers for the research question have mean scores above the decision rule. Also, the standard deviation value of 1.01 indicate harmonious decision by the respondents.

3.2 Research Question Two

Table 2: What are the competency level of Economics teachers in the use of ICT for the teaching and learning of economics in schools.

S/N	Item focus	X	SD	Decision
1.	Most Teachers cannot utilize the internet facilities.	3.08	0.99	Agreed
2.	Most teachers do not posses to the skills to access the internet	2.54	0.76	Agreed
3.	Some Teachers do not have Email addresses.	2.71	1.02	Agreed
4.	Most Teachers cannot access web sites.	3.24	0.79	Agreed
5.	Some Teachers cannot develop Economics software packages.	3.01	1.21	Agreed
6.	Majority of Economics teachers cannot download information for the web/internet	2.63	0.87	Agreed
7	Most economics teaches cannot upload their lecture note on the internet	2.81	0.68	Agreed
Pooled mean		3.34	0.90	

From table 2, it could be observed that the respondents are in agreement that most economics teachers lack the competency to fully integrate ICT in the teaching/learning of economics at the senior secondary school level. This can be deduced for the pooled mean of 3.34

and a standard deviation of 0.90. Based on the responses of the respondents, it is obvious that majority of economics teachers lack the capability of integrating ICT in delivery of economics course contents.

3.3. Research Question Three

What are the challenges faced by Economics teachers in the use of ICT in teaching and learning of economics in schools.

Table 3: Challenges faced by Economics teachers in the use of ICT in teaching and learning of economics in schools

S/N	Item focus	X	SD	Decision
1.	Most teachers lack computer application skills.	3.41	0.58	Agreed
2.	Most teachers cannot browse the internet.	3.20	0.65	Agreed
3.	Teachers are not computer literate.	3.43	0.79	Agreed
4.	Poor supply of stable electricity	3.32	0.84	Agreed
5.	Teachers can access the internet with ease.	2.47	1.12	Disagreed
6.	Economics teachers lack the competence to develop economics software packages.	3.11	0,78	Agreed
7.	Lack of technical support for ICT projects.	3.65	0,74	Agreed
8.	It is very expensive to install ICT facilities in school	3.34	0.82	Agreed
	Pooled mean	3.28	0.78	

Table 3 which focused on the challenges faced by economics teachers in the use of ICT in the teaching/learning of economics, showed that the pooled mean of 3.28 is above the cut-off point of 2.50 showed that the respondents are in agreement that some of the challenges faced by most economics teachers in integrating ICT include; lack computer application skill, inability of economics teachers to browse information from the internet, poor electricity supply etc.

4. Discussion

The result of data analysed in Table I revealed that the respondents agreed that the facilities for the integration of ICT in the teaching and learning of economics at the senior secondary school levels are not available. This can be deduced from the respondents responses that most schools lack adequate computer set, internet connectivity, poor power supply Kwalat (2014) opined that the unavailability of resource materials needed for integration of information and communication technology is a constraint to the use of ICT for teaching/learning of economics in secondary schools. He went further to say that even when they are available it is either absolute, weak or inadequate.

The results of data analysis presented table II revealed that the respondents are in agreement that most economics teachers lack the competency to fully integrate ICT in the teaching/learning of economics at the senior secondary school level. Supporting this finding Nworgu (2001) submitted that the personnel normally entrusted with the responsibility of training and teaching students on the utilisation of information and communication technology are poorly equipped with the basic and necessary skills needed for the realisation of the set objectives. He added that about 60% of the teachers teaching economics in secondary schools in both urban and rural areas in Nigeria do not have e-mails and most times are computer ignorant. Pelgrum (2001) also affirmed that lack of proper integration of ICT in the teaching and learning is due to teachers' lack of competence and confidence levels in skills

The study further revealed that some of the challenges faced by most economics teachers in integrating ICT include; lack of computer application skill, inability of economics teachers to browse information from the internet, poor electricity supply among others. The finding is in agreement with Kwalat (2014) who noted that insufficient power supply, poor internet

connectivity, shortage of qualified teachers with ICT knowledge, lack of support staff are combined factors militating against a successful integration of in the teaching and learning of economics in schools.

5. Recommendations

The following recommendations were made based on the findings of the study:

1 Government should increase the budgetary allocation to schools to enable them procure the necessary ICT facilities that will help in the integration of ICT in the teaching and learning of economics

2 In-service training as well as regular workshop should be organised for all economics teachers on current trends and reforms on the utilisation of ICT in teaching and learning of economics

3 There is need for all teacher training institutions to allocate more time in the teaching of the course content of "ICT in education" and also to ensure that teacher trainees are encourage to have their personal laptop. This will go a long way in building their competence and confidence in ICT.

4 Finally, more ICT support staff should be employed to assist in the development of software applications on pedagogy.

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