International Journal of Library and Information Technology (IJLIT), Vol.3 No.1, February 2023. Pg.47 - 52

UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN ENHANCING THE QUALITY OF TEACHING AND LEARNING OF ECONOMICS IN SECONDARY SCHOOLS IN EBONYI STATE.

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Abstract
The study investigated the utilization of information and communication Technology in enhancing the quality of teaching and learning of Economics in public secondary schools in Ebonyi State of Nigeria. The study was a survey design guided by two research question and one null hypothesis. A total of 141 Economics teachers participated in the study. A duly validated 20-item questionnaire was used to collect relevant data for the study. Mean (x), standard deviation and t-test were used for data analysis. The study revealed a low utilization of ICT by Economics teachers in the teaching of Economics subject in the secondary schools and this was consistent between the Economics teachers in the urban and rural areas. A number of approaches for improving the utilization of ICT by Economics teachers were enumerated and analysed. It was recommended that schools and Economics teachers should embark on self-help efforts to acquire and use these ICT tools for effective teaching and learning of Economics.

KEY Words: Information and Communication Technology, Economics and Secondary Schools.

Introduction

There are increasing complexities and changes in our modern educational system, as well as in the societal demands. These have made the use of Information and Communication Technology (ICT) imperative in education. Information and Communication Technology (ICT) as described in National Policy on Education, are any equipment or interconnected system of equipment that are used in the automatic acquisition, storage, manipulation, management, control, display, switching and transmission of information (FRN, 2001). In this regard, ICT is seen as tools that are comprised of electronic devices which are utilized for information and communication needs of institutions, students, teachers and school administrators. Such devices include computer (hardware and software), networking, telephone, mobile phones, videos, multi-media and internet and so on. Based on the importance of ICT, many countries of the world have now embarked on education reforms which aim at integrating ICT into their school curriculum and school management. In line with this development, Trother and Zehr as cited in Obi(2010), noted that in most schools computer technology is increasing at rapid rate, including more internet connections to classrooms, computer laboratories and in the libraries.

The Federal Government of Nigeria has stated in the national policy on Education that Government shall provide necessary infrastructures and trainings for the integration of ICT in advancing knowledge and skills in the modern world education (FRN, 2004). Pursuant to this, the federal government undertook the project of providing ICT equipment for many schools and institutions and also provided training on the use of these equipment to enhance teaching and learning. In this same vain, Ebonyi State Government in its EBSIDS (Ebonyi State Integrated Development Strategy) programme for education which is part of its education sector plan, provided ICT equipment like the computers and there accessories to the secondary school in the three education zones of the state.

This integration in education is relevant in the subject of Economics, especially in the use of ICT in its teaching and learning. Despite the great importance of Economics as a subject in senior secondary curriculum, the performance of students in external examinations has continued to decline. In order to step up the quality of instruction in Economics, there is great need to integrate information and communication technology in the teaching and learning of the subject. Nwosu(2003), noted that combined with the traditional sources of information(teacher and textbook), ICT presents itself as versatile teaching and learning aid which undoubtedly leads to improved and efficient teaching and learning. He reported that recent research findings showed that classroom teachers who had adequate personal and professional development in ICT utilization generally had their students performing better their counterparts who did not acquire that.

ICT, has the following potentials in enhancing the teaching and learning of Economics in schools. Such potentials can be inferred from the following:
1. Accelerates and deepens students in understanding Economics concepts.
2. Updates students' economics knowledge on recent economic trends, ideologies; and
economic concepts.
3.Challenges students to learn independently and hence be responsible;
4. Prepares the individual student to economically survive and become productive in tomorrow world of works which are ICT driven;
5. Provision of unrestricted access to teachers and students to relevant information and development on economic issues;
6. Empower individual learners to seek explanations, compare experiences, investigate problems associated economic issues(Oleabhiele, 2010).

In the sphere of Economics teachers' professional development and practices, they would benefit from areas of information retrieval and dissemination, distance learning, career exploration, counselling intervention, networking among colleagues, amongst others. In relation to their efficiency in teaching to their students, David (2004) ,asserted that teachers' work with individual student in psychological vacuum is replaced or supplemented by a more diffuse approach, utilized a more varied range of intervention on use of ICT-based resources with a greater emphasis on the individual as active agent rather than a passive recipient within the teaching and learning process. Specifically, the internet has created an increased number of resources from which a teacher can access and learn about teaching,/ researching procedures and obtain useful information to help their students. More interestingly, internet has expanded the nature of bibliographic resources by offering information on websites and increasing the accessibility and the number of databases that provide either indexing or full-text of the economics concepts and literature (Gala & Mickes, 2000). It has also become possible for students to receive information in spite of the barriers of space, place or time from the teachers without being physically present during teaching sessions. Ola (2007), also noted this relevance of ICT in teaching profession when he asserted that teachers now have opportunity not only to interact with the outsider but also reach a larger number of students at a time and collaborate with others outside the school system using presentations. Although the relevance of ICT in teaching improvement has been widely acknowledge and increased provision of computers and internet in most towns and schools has been recorded, teaching of Economics in the secondary schools in Ebonyi State appear not to have changed significantly from what it used to be in the pre-ICT days. Economics which is a science of optimization and rationalization requires the use of ICT facilities and other concrete instructional materials to teach because it is abstract in nature,(Ogbueghu, Nwofor &Ifere,2021). Based on this, Ebonyi State government like other governments in the federation of Nigeria, introduced ICT facilities in its schools yet students' performance in the subject seems not to be encouraging. One wonders whether Economics teachers use ICTs at all in their class room teaching; and what possible approaches that could be adopted to improve their utilization. It is in attempt to clarify the above issues that has necessitated this study.

Research questions

1. To what extent do Economics teachers utilize ICT in the teaching and learning of Economics in secondary schools in Ebonyi State?

2. What approaches should be adopted to improve Economics teachers' utilization of ICT in the teaching and learning of Economics in secondary schools in Ebonyi State?

Hypothesis

Ho1: Economics teachers in the Urban and rural secondary schools will not differ significantly in their utilization of ICT in teaching Economics.

Methodology

A descriptive survey design was adopted in this study. The population of this study consists of all the Economics teachers from 121 public secondary schools in Ebonyi state. While the sample of the study consists of 141 Economics teachers randomly drawn at the rate of 47 from each of the three education zones of the state.

A 20-times questionnaire titled "Economics teachers ICT Utilization Questionnaire (ETICTUQ) was used for data collection. The instrument has three sections, A-C. Section A sought information on the respondents' demography, and section B and C elicited information relevant for answering the research questions posed in the study. Section B contains ten items with a response format of: very High (VH), High (H), Low (L) and Very Low (VL). Section C contains 10 items with the response format of: Strong Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

The instrument was validated by three experts, two from Social Science Education and one in Measurement and Evaluation. They affirmed the face and content validity of the instrument. Their corrections were duly effected in the final production. The reliability of the instrument was established by test-retest method. The questionnaire was given to 21 Economics teachers from pubic secondary schools in Enugu State, a nearby state with common characteristics. Data obtained were correlated using Cronbach Alpha to determine the internal consistency. A reliability of 0.82 was obtained which is an indication that the instrument was reliable.

The data collected were analysed using mean, standard deviation and t-test. The research questions were answered using mean and standard deviation. The extent of utilization of various ICT tools was categorized as follows: Mean values below 2.50 = "low utilization", 2.50-2.99= "Average utilization" and 3.00-4.00 = "high utilization." For research question 2, items with mean values of 2.50 were taken to be "accepted" approach while mean values below 2.5 were adjusted to be "rejected" approach. The hypothesis was tested using t-test at 0.05 level of significance.

Results

The data collected were analysed and presented in line with the research questions and hypothesis used in the study. These are presented below:

Table 1: *Mean Ratings of Economics teachers Utilization of ICT in teaching Economics in secondary schools in Ebonyi State.*

S/N	Items statement	$\overline{x}$	SD	Decision
1.	I use computer for economics lessons	2.47	0.64	Average
2.	I use database to access economics instructional materials	2.04	0.55	Low
3.	I explore websites for recent trends in economics.	2.20	0.61	Low
4.	Microsoft excel is used to store my students records and data	1.08	0.56	Low
5.	I teach my students using internet chat	2.12	0.61	Low
6.	I evaluate my students psychological tests using computer	1.42	0.65	Low
7.	I gather career information for my students from the relevant websites	2.64	0.86	Average
8.	I interact with my students through emails	1.56	0.76	Low
9.	I use power point to reinforce the skills taught	1.15	0.64	Low
10.	I generally use the internet to retrieve economics information	2.71	0.89	Average

Result in Table 1 above, shows that Economics teachers on the average use ICT tools like computer, the websites and internet for economics lessons and for retrieving information on economics trend. This was shown by the mean values of 2.47, 2.64 and 2.71 of items 1, 7 and 10 respectively. On the other hand, mean values of items 2, 3. 4, 5, 6, 8 and 9 which are below 2.5 shows that economics teachers utilization of these ICT components were low.

Table 2: *mean ratings of economics teachers on approaches for improving their utilization of ICT in teaching economics.*

S/N	Items statement.	$\overline{x}$	SD	Decision
11.	Provision of computers for all the secondary schools	3.26	0.92	Accepted
12.	Provision of technical training for economics teachers to help acquire the skills	2.94	0.81	Accepted
13.	Provision of adequate power supply	3.98	0.92	Accepted
14.	Government provides funds for maintenance and purchase of computers	2.76	0.72	Accepted
15.	Organizing workshops and seminars for economics teachers	2.60	0.69	Accepted
16.	Provision of adequate security to guard the ICT facilities	2.53	0.63	Accepted
17.	Integrating ICT in economics educators pre-service education curriculum	3.02	0.86	Accepted
18.	Involvement of communities and private individuals in supporting ICT initiatives in schools	2.72	0.87	Accepted
19.	Deploying resources persons as facilitators for entrepreneurship / ICT skill acquisition programmes	2.57	0.69	Accepted
20.	Creation of ICT user-friendly environment	2.16	0.60	Rejected

Results shown in table 2 above, indicated that the economics teachers accepted that the approaches suggested in items 11 to 19 were necessary for improving the utilization of ICT in the teaching of economics in their schools. However, item 20 was not accepted as a good approach to improving the utilization of ICT in the teaching of economics, this was shown by the mean score of 2.16.

Table 3: *t-test for Mean Difference between Urban and Rural economics teachers on Utilization of ICT in teaching economics*

Location	**N**	$\overline{x}$	***SD***	**df**	**t-cal.**	**t-crit.**	**Decision**
urban	110	2.26	0.94	139	0.26	1.96	Not Rejected
Rural	31	2.24	0.73				

The above shows that 0.05 significance level and df of 139, the t-cal of 0.26 was less than the t-critical of 1.96. the null hypothesis of no significant difference was upheld. This shows that economics teachers in urban and rural schools do not differ significantly in their level of utilization of ICT in the teaching of economics in their schools.

Discussion

The findings of this study suggest that economics teachers' utilization of ICT in the teaching of economics in secondary schools in Ebonyi State is low. This is contrary to the previous research conducted by Anyamene and Anyachebelu (2008) which revealed that Guidance and Counsellors' in public secondary schools in Anambra state know the way ICT can be utilized in guidance and counselling. Despite the provision of computers by the state government for the secondary schools, it is quiet perplexing that low level of usage by economics teachers was recorded. One of the reasons for this low utilization could be

explained by the findings of Haddad and Jurich (2005), that despite the potentials of ICT, it has not been easily accepted by all teachers. Indeed, the conservative nature of some school teachers, which economics teachers are inclusive, could be one of the reasons of the inability to adopt ICT in their teaching activities.

School location was found not to be a significant factor in economics teachers' utilization of ICT in the teaching of economics in secondary schools in Ebonyi State. This finding appears to contrast with the speculations that teachers in urban schools are more exposed to ICT facilities and supportive resources for ICT usage in curriculum implementation in the classroom. This shows that equal attention should be given on ICT usage for all teachers irrespective of their school location.

The study further revealed a wide range of approaches accepted by economics teachers' for improving their utilization of ICT in teaching of economics concepts. These ranged from provision of more computers, power supply, security, resources persons for ICT and the organization of workshops, amongst others. This is line with the position held by Onuh and Ofojebe (2007) that if necessary conditions are in place, ICT will help to improve the quality of instructions in our secondary schools.

Conclusion and Recommendations

Basically, the application of information and communication Technology (ICT) has potential for enhancing the quality of curriculum implementation by teachers in the school system as has been extensively explored and outlined by many scholars. Although steps to integrate ICT in secondary education in Ebonyi State has been initiated through the provision of computers in its schools by both present and previous administrations, but the utilization of these tools for effective teaching and learning purpose has remained low. In view of this, the following recommendations are made;

1. Intensive training on the integration of ICT tools in teaching and learning should be pursued and sustained by the state government. This is because new versions of these technologies are developed continuously as old versions expire.
2. Although, internet facilities could be accessed in cybercafés around, greater accessibility can be enhance for economics teachers when school managements on their own, access their service by subscribing for internet access from nearby IT companies. By this way, economics teachers can have access to recent trends in economics, as a dynamic subject from the website while in school.
3. The perennial problem of power supply which hinder the use of these ICT tools could be solve by partnering with private individuals to provide generators or inverters for the school.
4. Economics teachers through their personal efforts should acquire their own computer and internet modem at hire purchase from IT companies. This is to enable them have more access to these facilities and gain greater proficiency in the use of these tools through continuous practice.

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