Teachers' Perception on the use of ICT for Instructional Delivery of Economics in Igbo-Etiti Local Government Area of Enugu State

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Abstract
It is widely believed that Nigeria's problem is not that of plan and policy formulation but that of implementation. Thus, since 1988, several policies have been formulated on information and communication technologies (ICTs) especially with regards to our school system. However, there have been little or no efforts towards their actual implementation. Consequently, in a bid to aid their implementation, this paper focused on teachers' perception on the use of ICT for instructional delivery of Economics in Igbo-Etiti Local Government Area of Enugu State. To be able to carry out this study five research questions were posed and all the sixteen public secondary schools is chosen for the study. A total of thirty-two teachers and 210 students randomly selected from 16 public schools responded to the questionnaire used for the study. Analysis of data collected from the respondents indicated that Economics teachers are already optimistically waiting for the adoption and utilization of ICTs for instruction in schools, which is in line with the results of previous studies that Nigerian teachers have positive attitude towards the use of computer on instruction. There are also indications that significant benefits will accrue to the stakeholders in education from the advocated integration of ICTs in instruction in Economics especially if some barriers are effectively tacked.

Keywords: Economics teachers, perception, benefits, ICT, attitudes, utilization and integration.

Introduction

Economics teachers in secondary schools are teachers who had undergone some training on Economics in either a recognized university or any other degree awarding higher institution in Nigeria. Economics teachers are expected to teach senior secondary school students and equip them with knowledge and functional skills that will help them pass senior secondary school certificate examination and be able to apply the skills acquired in solving their daily economic problems. Economics contents taught in secondary school contain both mathematical and theoretical aspects which are taught concomitantly through Senior Secondary one to Senior Secondary three. Teachers had over years, been teaching Economics with the aid of some teaching materials like charts, recommended texts, meter rule, set square, and live materials which could be improvised by the teacher to help him/her effectively teach the students. However, recently, new and improved teaching aid had continued to emerge amongst which is information and communication technology. Teaching aids and instructional materials play a major role in facilitating learning and their importance in teaching and learning had been evident,

The importance of use of teaching aids cannot be over emphasized. Madueke (2011) pointed out that use of improvised materials and teaching aid in the art of teaching not only engage both the students' auditory and sensory organs in the art of teaching, but they also help students to remember effectively contents learnt. Today, the use of information and communication technology gadgets to teach contents in Economics has proved to be a better teaching aid. This claim is supported by UNESCO Information and Communication Competency Framework for Teachers (ICT, CFT) (2011) which highlighted gains in using ICT to teach students. Some of the gains include the fact that the use of ICT gadgets to teach students makes the content taught more interesting to the students and sustains their attention as a new technological device is used to learn and this makes contents taught to appear interesting and fun.

ICT has several definitions depending on the nature of its use. In this research, Information and Communication Technology (ICT) is used in its generic term to include any communication device or application encompassing radio, television, phones, computers, satellite system as well as the various services and applications associated with them such as video conferencing and distant learning. The Federal Government of Nigeria in the National Policy on Education (Federal Republic of Nigeria, 2004) recognizes the prominent Role of Information and Communication Technology (ICT) in the modern world and has integrated (ICTs) into education in Nigeria at all level. According to Haddad and Draxler (2002), ICT have the potential to contribute to effective learning through expanding access, promoting efficiency, improving the quality of teaching and improving management systems. ICT as a tool in education helps students to be able to communicate, create presentations in Power Points, interact with colleagues and teachers.

Hence, ICT integration is the presentation and distribution of instructional content through web-environment (e-learning) or system offering an integrated range of tools to support learning communication. The advent of the digital age has dramatically transformed every aspect of human life, the way we work, the way we play, the way we live and the way we learn. Hence, it is regarded as the modern blocks of modern society (United Nation for Economic and Socio-Cultural Organization UNESCO, 2002).

In retrospect, Nigeria had witnessed the introduction of the National Policy on Computer Education in 1988 (Federal Republic of Nigeria, 1988). The 1988 document contained information on the application of computer at various levels of the country's education and with issues related to basic objectives, hardware and software requirements (Yusuf, 2007). Further, the need for ICT integration into the Nigerian school system came with the 2001 National Policy on Information Technology, tagged "Use IT". It was a major step in the integration of ICT into all facets of the country's life. The document on National Policy on IT according to FRN (2001) in the areas of education, among others, envisaged the development of IT curricula for all levels of Nigerian education.

The Federal Ministry of Education has launched an ICT-driven project known as School Net (Federal Republic of Nigeria, 2006) which was intended to equip all schools in Nigeria with computers (Okebukola, 2004). In June 2003, at the African Summit of the World Economic Forum held in Durban South Africa, the New Partnership for African Development (NEPAD) launched the e-school initiatives intended to equip all African schools with ICT equipment including computer, radio, television, phones, fax machines, digital copiers, etc. It was also meant to connect African Students to Internet. The NEPAD capacity building initiatives was to be executed over a ten years period, with the high school component being completed in first five years. The aim of the initiative is to impact ICT skills to young African in primary and secondary schools and harness ICT to improve, enrich and expand education in African countries.

According to UNESCO (2004), there are three main approaches to ICT taken by teachers. They are:

Integrated Approach which encompasses planning the use of ICT within the subject matter to enhance particular concepts and skills and improve student attainment. It involves a careful and considered review of the curriculum area, selecting the appropriate ICT resource which will contribute to the aims and objectives of the curriculum.

Enhancement Approach which involves the use of an ICT resource which will enhance the existing topic through some aspects of the lesson and task.

Complementary Approach that involves the use of an ICT resource to empower the pupils learning for example by enabling them to improve their class work by taking notes on the computer or by sending homework through e-mails.

Several studies have indicated the benefits of ICT integration at all levels from computer mediation in school subject. The computer assisted instruction was found more effective in all educational levels and with lower achieving students, Ezugwu (2009). ICTs improve students' problem-solving skills, provide opportunity for student constructed learning, increase students' collaboration on projects, increase the preparation of student for most careers and vocations and improve confidence and attitude of students (Cradler and Bridgeforth, 2003). Umar (2017) outlined the three main advantages of ICT infrastructure for education to include that through ICT:

- images can easily be used in teaching and improving the retentive memory of students;
- teachers can easily explain complex instructions and ensure students' comprehension; and
- teachers are able to create interactive classes and make the lessons more enjoyable, which could improve student attendance and concentration.

Perception refers to the way one think about something and one's idea of what it is

like. Also it is the ability to understand the true nature of a subject especially as it affects our environment. Perception is our sensory experience of the world around us and involves both the recognition of environmental stimuli and actions in response to these stimuli. Through the perceptual processes, we gain information about properties and elements of the environment that are critical to our survival. Perception does not only create our experiences of the world around us; it also allows us to act within our environment. Perception includes the five senses; touch, sight taste, smell and feeling. To this ends, "the cognitive field theories assume that perception includes all the different ways a learner has of getting to know his environment" (Ngwoke, 2010:60).

Consequently, there are lack of access to resources due to lack of hardware, poor organization of resources, poor quality hard ware, inappropriate software and lack of personal access for teachers. There are also lack of time to use ICT facilities as a result of school over-crowded timetable, technical problems due to lack of technical support, fear of things going wrong, lack of telecommunication and other infrastructure and unreliable power supply (British Education Communications and Technology Agency (BECTA), 2004). Teachers' level of use of ICT has over the years been a problem facing the teaching and learning of Economics despite its benefits in concretizing learning. It is against this that the researchers decide to carry out a study on teachers perception on the benefits, constraints and strategies of using Information and Communication Technology for Economics instruction in secondary schools in Igbo Etiti Local Government Area.

Ololube, Ubogu and Ossai (2008) were of the view that the introduction of ICT, usage, integration and diffusion has initiated as new age in education methodologies, thus it has radically changed traditional method of information delivery and usage patterns in the domain as well as offering contemporary learning experience for both instructors and students.

Teaching as a profession encompasses as Norman (2010) asserts that it is a complex process as no specific activity is identified but a web of activities. It involves the interaction of the teachers and students within an environment to have a positive impact on the learners. It is an activity designed by a person more experienced more knowledgeable and more mature with respect to learning experience to further the education of another. It presupposes that both the teacher and he learners must be active in the process of teaching and learning.

Economics by definition was construed by Robbins (1977) as the science which studies human behaviour as a relationship between end and scarce means which have alternative uses. The word end refers to numerous desires, needs or goals of individuals, business or government. Scarce means implies that resources are limited in supply. The word alternative uses suggest the facts that these scarce means can be put to various uses.

Many different types of technology can be used to support and enhance learning. Everything from video content and digital movie making to lap top computing and hand held technology has been used in classrooms. Similarly, new use of technology such as pod casting are constantly emerging (Marshal, 2002). To Marshall, various technologies deliver different kind of content and serve different purposes in the classroom. Word processing and email encourage communication skills; data base and spread sheet programmes promote organizational skills and modeling software promotes the understanding of science and mathematics concept.

Some of the empirical studies reviewed by Rita and Angie (2011), Kalu, Agwu and Okori (2008) and Aladejana (2009) shows that ICT integration in secondary schools has not produced significant result in the teaching and learning of economics or their findings indicates that teachers virtually do not involve the use of ICT in their teaching of economics in secondary schools. Hence, none of this literature reviewed indicates teachers perception on the benefits, constraints and strategies of integrating ICT into teaching and learning of economics. In view of the above, a research gap is therefore created. It is based on this gap that the present study aims to fill.

The study will offer invaluable information to the government, teachers, students and other stakeholders like parents, employers of labour as well as policy makers in education as to the nature of the contribution of ICT to the teaching – learning process. To the government, the findings of the study will provide valued information on the need to translate ICT policy into reality by making them to provide ICT facilities which will foster human capital and country's development. It will also help the government to decide on alternative approaches to be adopted to enhance the integration of ICT in the teaching and learning of Economics. The findings of this study will provide the need for seminars/workshops for retraining of teachers to equip them with more didactic competencies, so as to assume their new role as expert in teaching and learning process. Hence it will provide the efficiency of delivery mechanism of educational services by supplementing conventional delivery mechanism in the following manners. Technology's capacity to reach learners in any place and at any time; has the potential to promote revolutionary changes in the education paradigm. This means eliminating the promise that learning time equal classroom time students can be encouraged to revisit the lesson topics to reinforce learning without active intervention by teachers. The students will only benefit from the findings of this study when the teachers have understood the benefits and strategies needed to use ICT in teaching and learning economics. The use of ICT in teaching and learning of Economics will encourage creativity, individualized learning, transfer of learning and make teaching and learning more lasting. It will help to concretize learning and make the understanding of economics easier for the students.

Statement of the Problem

The adoption and use of ICTs in schools have positive impact on teaching, learning and research. Despite the role ICTs play in education, secondary school teachers in Nigeria are yet, to extensively adapt them for teaching and learning even where the ICT facilities are readily available. Problems such as poor project implementation strategies and poor information infrastructure has limited the effects geared towards the integration of ICT into secondary school instruction. Ololube, Ubogu and Ossai (2008) were of the view that the introduction of ICT, usage, integration and diffusion has initiated as new age in education methodologies, thus it has radically enhanced traditional method of information delivery and usage patterns in the domain as well as offering contemporary learning experience for both instructors and students. Marshal (2002) stated that various technologies deliver different kind of content and serve different purposes in classroom. Word processing and email encourage communication skills; data base and spreadsheet programmes promote organizational skills and modeling software promotes the understanding of science and mathematical concept. Some of the empirical studies reviewed by Rita and Angie (2011), Kalu, Agwu and Okori (2008) and Aladejan (2009) shows that ICT integration in

secondary schools has not produced significant result in the teaching and learning of economics as their findings indicates that teachers virtually do not involve the use of ICT in their teaching and learning of economics in secondary schools. In order to ensure that ICTs are widely adopted and used for teaching economics in Nigeria secondary schools, this study seeks to find out why teachers do not use ICT facilities despite the benefits associated with it. It also tries to find out the constraints and strategies of integrating ICT into the secondary school instruction.

Purpose of the Study

This study sought to determine the teachers' perception on the benefits, constraints and strategies in the integration of ICT into teaching and learning of economics at the senior secondary school level. Specifically, the study sought to determine economics teachers' perception on the following:

1. the knowledge level of economics teachers on the integration of ICT into teaching and learning economics.
2. benefits that can result from the integration of ICT into teaching and learning of economics.
3. the extent to which economics teachers use ICT in teaching and learning of Economics.
4. constraints that may hinder the effective integration of ICTs into senior secondary school Economics.
5. the strategies that could be adopted in enhancing ICT integration into teaching and learning of Economics.

Research Questions

The following research questions were posed to guide the study.

1. What is the knowledge level about the integration of ICT into teaching and learning of economics?
2. What are the benefits that could result from integrating ICT into teaching and learning of economics?
3. To what extent do economics teachers use ICT into teaching and learning of economics?
4. What are the barriers that may hinder the effective integration of ICTs into secondary school Economics?
5. What appropriate strategies could be adopted in enhancing ICT integration into teaching and learning of Economics?

Method

The design of the study was descriptive survey research design. This design was chosen because the study sought to collect data on the perception of a given population in a systematic way such that the findings are expected to be generalized to the entire population (Nworgu, 2006). The study was carried out in Igbo Etiti Local Government Area of Enugu State in Enugu North Senatorial District of Enugu State, South-East Geo-political zone of Nigeria. This area was chosen because of its proximity, for in-depth study and to make economics teachers understand the relevance and strategies that can be applied in the use of ICT to make the teaching and learning of Economics more concrete. The target population of this study consists of all the economics teachers in the sixteen (16) public secondary schools in Igbo-Etiti Local Government Area consisting of thirty-two (32) teachers. It includes also a total of one thousand, three hundred and twenty (1,320) students who offer economics in senior secondary school in 2015/2016 calendar year (source: PPSMB, Nsukka, Enugu State). A stratified random sampling technique was adopted to select 210 students from the total population of economics students while there was no sample for the teachers because their number is small. Senior secondary two students were used for the study. The reason for this was that senior

secondary three students are examination class while senior secondary one student has not had enough economics lessons. A set of structured questionnaire was designed to get information from teachers and students of Economics in all the 16 public secondary schools. Two separate questionnaires were designed for students and teachers. The questionnaires were designed to cover the five research questions. The questionnaire was drafted by the researcher and given to three experts; two from social science education and one from department of science education, all in University of Nigeria, Nsukka. It was both content and face validated after which some items were revised or modified in all the clusters. The researcher made use of the split-half method in ascertaining the reliability of the instrument by making use of estimate of internal consistency. The questionnaire was administered to teachers of public secondary schools in Igbo Etiti Local Government Area of Enugu State. The researcher was assisted by teachers trained as research assistants especially while administering the questionnaire meant for students. In some cases not all the questionnaire may be returned as answered. However, cases of anonymity and non-retrieval of questionnaire were very minimal, usually less than 5 per cent of the total number of respondents. The instrument was collected, sorted out, scored and analyzed. The data collected was analyzed using simple percentages, mean and charts. The decision rule is such that any response with 50% and above shall be accepted and responses below 50% shall be rejected. However, decision rule for the mean is that the mean value from 2.5 and above shall be accepted while the mean of 2.47 and below shall be rejected.

Results

In this section, the data obtained are analyzed and discussed. The data were interpreted using tables and were organized and analyzed according to research questions addressed by the study.

Research Questions 1

What are the levels of Economics teachers' perception on ICT integration into teaching and learning of Economics in Igbo-Etiti Local Government Area

Table 1

The Percentage responses on the levels of Economics teachers' perception of ICT integration into teaching and learning of Economics in Igbo-Etiti Local Government Area

S/N	Items	% of correct	% incorrect
1	What is the full meaning of ICT	35.7	64.3
2	Where have you had special training on ICT?		
	(i) Workshop	28.6	71.4
	(ii) In-service training	28.6	71.4
	(iii) Private training	25	75
	(iv) No training yet	17.9	-

3	Which of these do you know how to operate?			
	(i)	e-mail	20.3	
	(ii)	internet	24	79.7
	(iii)	computer	16	76
	(iv)	spreadsheet packages	14.7	84
	(v)	Corel-Draw	17.9	95.3
				82.1

Results presented in table 1 above show the percentage responses on the levels of economics teachers' knowledge on ICT integration into teaching and learning of Economics. Items 1 to 3 are all rejected as they fall below the acceptance percentage requirement of 50%. Thus, we conclude that the levels of economics teacher's knowledge on ICT Integration into teaching and learning in Nsukka L.G.A. is very poor as shown in the percentage responses above.

Research Question 2

What are the perceived of integrating ICT in teaching and learning of Economics?

Table 2

Mean rating of the respondents on the benefits that could result from integrating ICT into teaching and learning of economics

S/N	Item	SD	A	D	SD	Total	$\vec{X}$	Decision
4	ICTs reduces the teacher's work load	34	16	4	2	194	3.46	Accepted
5	ICTs can help in the up-dating of subject content and teacher's knowledge.	36	16	4	2	201	3.58	Accepted
6	ICTs can help in development of independent study habits by both teachers and learners.	36	22	0	0	210	3.75	Accepted
7	ICTs are every useful in evaluation, record keeping, recall and usage.	36	18	4	2	208	3.71	Accepted
8	ICTs can reduce the inadequacies of instructional materials in the teaching and learning of economics	28	22	4	2	188	3.36	Accepted
9	ICTs are applicable in teaching of all topics in economics.	20	18	18	4	174	3.11	Accepted
10	ICTs are suitable for different capabilities of learners.	16	30	10	0	174	3.11	Accepted
11	ICTs can motivate both the teacher and learners of economics.	20	26	6	0	170	3.04	Accepted
12	ICT can make teaching and learning of economics interesting and relatively concrete.	22	32	2	0	188	3.36	Accepted

The results as shown in Table 2 above indicated that all the items on the benefits of ICT integration into teaching and learning of Economics were all accepted by the respondents as being relevant and necessary.

Research Question 3

To what extent do economics teachers use ICT in teaching and learning?

Table 3

Mean rating of the respondents on the benefits that could result from integrating ICT into teaching and learning of economics

S/N	Item	SD	A	D	SD	Total	$\vec{X}$	Decision
13	In teaching all economics concepts	12	32	10	2	166	2.96	Accepted
14	In recording students performance.	30	16	8	2	186	3.32	Accepted
15	In drawing charts and graphs	34	12	12	2	196	3.54	Accepted
16	In chatting with students.	16	20	12	8	156	2.79	Accepted
17	In giving assignment	24	20	12	4	184	3.29	Accepted
18	In giving feedback through mails	13	12	14	8	144	2.57	Accepted
19	In projecting information	32	16	6	2	190	3.39	Accepted
20	In sourcing of materials	44	8	14	4	231	4.14	Accepted
21	In analysis data.	28	12	12	4	176	3.14	Accepted

The results presented in Table 3 showed the extent to which economics teachers' use ICT instruction delivery of Economics in secondary schools. Items 13-21 presented here were all accepted, showing that Economics teachers make use of ICT in their Economics Instruction.

Research Question 4

What are the barriers that may hinder the effective integration of ICTs into senior secondary school economics?

Table 4

Mean rating of the respondents' perception on barriers to may hinder the effective integration of ICT into senior secondary school economics

S/N	Item	SD	A	D	SD	Total	$\vec{X}$	Decision
22	Short time allocated to teaching and learning of economics in school time table etc.	22	18	10	6	168	3.000	Accepted
23	Inadequacy of structural facilities like power supply.	36	10	4	6	188	3.35	Accepted
24	Lack of specific and localized content software in economics	22	24	4	6	174	3.11	Accepted
25	Inadequate trained man power/teachers in the use of ICTs in the study of economics.	36	14	2	4	194	3.46	Accepted
26	Most schools have no access to internet.	36	18	0	2	198	3.54	Accepted
27	Lack of funds for adequate purchase of ICTs components for schools.	38	14	4	0	202	3.61	Accepted
28	Lack of teachers' confidence in the operation of ICT Accessories.	18	24	6	8	164	2.93	Accepted
29	Teachers' anxiety in the use of computer.	20	18	10	8	162	2.89	Accepted
30	Corruption with respect to mismanagement of fund meant for the acquisition of ICT facilities	32	16	4	0	184	3.28	Accepted

Results contained in Table 4 showed that all the items were accepted as possible barriers to effective integration of ICT into the instructional process in the teaching and learning of economics in the senior secondary schools with mean scores above 2.5 each.

Research Question 5

What appropriate strategies could be adopted in enhancing ICT integration into teaching and learning of economics?

Table 5

Mean responses on the perceived strategies for enhancing ICT integration into teaching and learning of economics

S/N	Item	SD	A	D	SD	Total	$\vec{X}$	Decision
31	Research should be conducted annually and nationally on the issue of ICT in education.	40	16	0	0	208	3.71	Accepted
32	Seminar and conferences should be regularly organized for economics teachers on the use of ICTs.	44	12	0	0	212	3.79	Accepted
33	Laptop purchase allowance/loan scheme should be provided to enable economics teachers buy laptops for use in teaching.	30	26	0	0	198	3.54	Accepted
34	Government should set up community based ICTs centers that have internet access for use by a group of schools.	26	24	24	2	186	3.32	Accepted
35	Basic infrastructures needed for full integration of ICTs in instructional process should be put in place.	32	22	0	2	196	3.50	Accepted
36	Economics teachers should be trained (pre and in-service) to be competent user of ICTs for instructional purposes.	88	14	2	2	200	3.57	Accepted
37	NGOs, communities and significant others should be involved in developing ICTs policies and their implementation at senior secondary school level.	34	20	2	0	200	3.57	Accepted
38	Resources person on the use of ICTs in economics should be employed in schools to assist teachers.	40	16	0	0	208	3.71	Accepted

The results presented in Table 5 indicated that all the perceived strategies mapped out were all accepted by the respondents as being relevant and necessary for the integration of ICTs into the teaching and learning of Economics in senior secondary schools.

Discussion of Findings

The research question one showed the level of Economics teachers, knowledge on ICT and its integration in teaching and learning of Economics in secondary schools. The result of the findings shows that the level of economics teachers' perception on ICT integration in teaching and learning of Economics in secondary schools is very poor. This hinders effective use of ICT in the teaching and learning of Economics in secondary schools. The finding of this study is in line with the empirical studies carried

out by Rita and Angie (2011), Kalu, Agwu and Okori (2008) and Aladegana (2009) that ICT integration in secondary schools has not produced significant results in teaching and learning of Economics since teachers by their findings virtually do not involve the use Economics in secondary schools.

In research question two, the researchers sought to find out the benefits that could result from integrating ICT into the teaching and learning of Economics. The result of the findings shows that the benefits of integrating ICT into the teaching and learning of economics include reduction on the teachers work load, help in up-dating of subject content and teachers perception, help on the development of independent study in both learners and teachers, useful in evaluation, record keeping, recalling and usage, reduce the inadequacies of instructional materials in teaching and learning of economics, etc. This finding is corroborated by the findings of Ololube, Ubogu and Ossai (2008) that the introduction of ICT, usage, integration and diffusion has initiated a new age in education methodologies, radically changed traditional method of information delivery and usage patterns in the domain as well as offering contemporary learning experience for both instructors and students.

The result of data analysis of research question three which sought to find out the extent of economics teachers use of ICT on teaching and learning of economics showed that economics teachers make use of ICT in their economics instruction. Economics teachers use ICT in teaching all economics concepts, recording students' performance, designing charts and graphs, chatting with students while giving them assignments. However, only very few teachers would do this due to poor perception of many of them. The study conducted by Cox, Preston and Cox (1999) argued that some teachers do not use ICT in their teaching because they are computer phobic. Some of the causes of the phobia are: psychological factors, sociological factors and operational factors. These problems can be effectively tackled through adequate training of teachers in ICT usage.

In research question four the researchers wanted to find out the barriers that may hinder the effective integration of ICTs into senior secondary schools economics. The questionnaire items on the barrier suggested integration of ICTs in teaching and learning of economics were fully accepted by the respondents. This is because each of the items had a mean above 2.5 showing acceptance. Thus the barriers included short time allocated to economics in the school timetable, inadequate of structural facilities like power supply, lack of specific and allocated content software in economics, no access to internet, etc. This finding is in line with the study done by Tella (2006) which reported that a lack of technical support in schools and teachers' lack of expertise in using ICT were the prominent factors hindering teachers' readiness and confidence in using ICT. In order words, for a teacher to be able to make good use of information and communication technologies during instruction, adequate training must be provided.

In research question five the researchers sought to find out the strategies for integrating ICT into teaching and learning of economics. The results of the findings in the study shows that all the strategies mapped out were all accepted by the respondents as being relevant and necessary for the integration of ICTs into the teaching and learning of economics in senior secondary schools. It further indicated that the entire school curriculum require urgent overhauling and enrichment to equip participants in the education system with the knowledge, skills and aptitude for understanding and appreciating the content and structure of

ICTs. Two of the most important supports for ICT integration into teaching and learning are effective initial teaching education (ITE) and continuing professional development (CPD). Both have the greatest impact on the beliefs and practice of teachers and yet professional development time in particular is often not budgeted for (Venezky, 2004). The UNESCO (2008) ICT competency standards for teachers describe three approaches; technological literacy, knowledge deepening and knowledge creation. Hence if those conceptualized approaches are adopted, teachers would not exercise any fear in the use and application of ICT approaches in the teaching and learning of Economics.

Implications of the Study

The findings of this study have some important educational implications for teachers, students, parents and curriculum planners and government.

The most important outcome of this study is that teaching economics is accompanied with a number of benefits including reduction of the teacher's work load, helping in the updating of subject content and teacher's knowledge, useful in evaluation, record keeping, recalling and usage, reduction in inadequacies of instructional materials in teaching and learning etc. Teachers should therefore upgrade their knowledge in this direction to enable them reap those benefits. Teachers should equally encourage their students by giving them assignment to search for information on the internet and to submit assignments online using their e-mails. This will help in promoting students' learning.

Parents should provide out of school training for their children as well as purchase computers or laptops and CD ROMs for their wards. This will help in promoting individualized learning among students. They should equally assist the school in purchasing ICT equipments needed for effective instruction.

Students on their own part should develop positive attitude towards the use of ICT as a modern tool for teaching and learning. Gone are the days when students have to wait for their teachers for everything they learn in school. They should engage in individualized instruction by acquainting themselves with cyber cafes in their search for information.

The findings of the study will enable curriculum planners to see the need for including ICT in Economics curriculum in schools. They should also organize workshops, seminars, symposia and conferences to educate and train in-service teachers on the use of ICTs in teaching and learning.

Government on its part should provide the enabling environment for technological development by providing the basic ICT infrastructures in schools. These may include equipping schools with computer laboratories, software and accessories, and linking school computers with broad bands for internet services.

Conclusion

The study highlighted some of the likely benefits arising from the integration and use of ICT to include reduction of teacher's workload, helping in the updating of subject content and teachers knowledge, useful in evaluation, record keeping, recalling and usage and reduction in inadequacies of instructional material among others. Prominent among the setbacks to teachers' integration and use of ICT in the teaching and learning of Economics were lack of technical support in schools, and teachers' lack of expertise. In order solve these problems the study recommended based on its findings three unavoidable approaches to include technological (or ICT) literacy by teachers, knowledge deepening (or in-service training) and knowledge creation (innovation).

Recommendations

1. In-service training, seminars, conferences and workshops should be organized for teachers on the use of ICTs in teaching and learning of Economics in senior secondary schools.
2. Voluntary agencies and non-governmental organizations should be compelled to assist the government in the implementation of the suggested strategies in schools.
3. Schools should be equipped with computers linked with internet facilities by State and Federal Government.
4. Government, should introduce lap top purchase allowance/loan scheme to enable teachers procure ICT equipment.
5. There should be constant supervision of teachers on the utilization of ICT in teaching and learning of Economics by the school authorities.
6. Economic teachers should avail themselves of the opportunity of utilizing the available ICT facilities through embarking on self study.
7. Basic infrastructures needed for full integration of ICTs in instructional process (especially in economics) should be put in place.

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