Effective Utilization of ICT in Secondary Schools in Rivers State

Amadi, E.A.
Rivers State University of Science and Technology, Nigeria

Mekuri Ndimele, J.A
University of Education, Port Harcourt, Nigeria

Aleru, G.E.
Community Secondary School, Nkpolu-Oroworukwo, Port Harcourt, Nigeria

ABSTRACT The implementation of Information and Communication Technology (ICT) in the teaching and learning processes in secondary schools will bring our youth in contact with information and technology revolution. This innovation has affected the lives of individuals and the nation's more so for those teachers that are *technophobic*. This paper discusses the effective use of ICT in the classroom environment and its benefits to teachers and students in learning environment. The paper encourages school administrators to commit themselves to ICT literacy and help develop and prepare students for tomorrow's leadership.

Keywords: ICT, teaching and learning, curriculum, classroom, courses

Introduction

Effective utilization of ICT as an instructional material in teaching and learning business studies in secondary school can not be overemphasized. It is firmly confirmed that introduction of this in secondary school has been given great awareness and wide spread. However, the step by step teaching and learning processes derived from ICT is more penitent in classroom situation. Teachers emphasis and commitment as to effective implementation of these instructional materials should be in line with the policy and curricular which enhance teaching and learning for the benefit of the students, who must not be passive learners. In many secondary schools, a major impediment is lack of qualified teachers to use these materials in teaching and learning. Although most schools do not have ICT and also some of the component are

lacking in the schools which cause major problems for the use of ICT, equipment and most importantly erratic electric supply, which affect the use of ICT equipment. Most importantly poor funding of schools and the purchase of all the needed facilities are never a reality. The crisis is further worsened as the number of teachers' and students increase. To meet the millennium development goals concerning eradication of illiteracy, it has been observed by many that meeting the desperate need for more qualified, competent teachers is the most persistent and daunting challenge facing the Nigerian education system in general and the interpretation of ICT in particular (Afe, 2000) and Olakehim (2007).

Literature Review

Effective utilization of ICT depends on the availability and accessibility of these resources which involve software and communication infrastructure, hardware and other components, computer sets, printers, Internet facilities, Audio cassettes and players, Audio tapes and scanners with many others. It is very clear that if technology cannot be accessed by the teacher, as in many educational settings in Rivers State, then it would be wasted. State funding is not adequate and so such resources are scarce. The practice of ICT tends to be more embraced in urban than rural areas. Instead of purchasing equipment for teaching and learning, schools, are increasingly being equipped with computers for administrative purposes (Henessy, *et al,* 2002). Connectively is improving and students are getting aware about the use of computers despite the ineffectiveness of equipment. Teachers' lack of commitment to the use of ICT in teaching and learning in the classroom situation indicate that there are challenges such that it is optional within the curriculum and this shows negative attitudes among school teachers towards the use of computers and internet facilities. Lack of appropriate course content for the teachers and learners also need to be emphasized. Many teachers are not working in conducive environment, in such working condition teachers tend to loose interest concerning the use of ICT which has contributed much for the ineffectiveness of teachers using ICT in the classroom.

Teachers' benefits in Utilizing ICT for Effective Teaching and Learning in Secondary Schools

Teachers' involvement in utilizing ICT in teaching and learning would enhance the interest of the learners and at the same time to the teachers. Tella *et al* (2007) reported that Adlika and Adeyinka (2007) teaching and learning of information communication and technology in secondary schools enhanced teachers' effectiveness and further made learning less stressful on the part of students. It also encourages students to be more active in class and independ-

ent in carrying out their class works. Learner tends to solve their personal problems concerning the classroom assignment and identifying their mistakes. There is therefore the need for teachers to see ICT as very useful in making teaching and learning easier. There should be professional policies that should be related to areas of specialization and be involved in teaching models. Emphasis should be placed on pedagogy underlying the use of ICTs for studies. Teachers should use ICT to arouse students' interest in learning subjects as to promote positive attitude towards information technology. If teachers involve the use of ICT effectively; it would serve as an important tool, instead of being more traditional pedagogy. This should be a challenge for educationists to harness the potentials of ICT to complement the role of teachers in the teaching and learning processes. It is observed that teachers who lack ICT skills cannot develop professionally in the use of modern technology and also feel threatened.

Problems Associated With Effective Use of ICT in the Classroom

One of the problems associated with the use of ICT is the ineffective participation for both teachers and students allocated to the teaching of the subjects. This is due to inadequate time and inadequate ICT facilities to accommodate all the students. If there are policies and curricula, emphasis in the clasc1 lack of adequate computers, which are in good working condition during the teaching and learning of ICT will be enhanced. Erratic power supply during the teaching and learning process which disrupt the use of the ICT facilities is another problem affecting the process. Generators should be kept standby to compliment electric failures. Lack of technical skill in terms of accessible internet will also affect the effective use of ICT since availability does not necessarily translate into use in the classroom.

Another major barrier to teachers is lack of incentive and support hindering them from the usage. Teachers should ensure flexible curricula as to have time for innovative classroom practice which would enable them to be more conversant with the software and hardware of computers. Pelgram (2002) observed that skilled teachers may need integrating ICT in students central learning approaches because other component as computer software and hardware, Internet facilities, Audio players and cassettes, transparency programmes, power point, slim strip projectors, fax machines, scanners are also important for the students' usage in the process of teaching and learning within classroom environment.

In classroom teaching, one of the components of computer is keyboarding which the teacher should use in the process of teaching and learning computer usage. This demands the skills of mastering the keyboard so that the student would avoid mistake as much as possible while typing their documents. It has been observed that many teachers and students are 'technophobic'—a

problem associated with ICT development. This is a major barrier and teachers need to integrate themselves in teaching and learning of ICT in order to be more relevant in the study. The knowledge of computer is very important in classroom set up and this is affected by the school environment. If the materials and equipment are there and what it takes for the process to be effective is provided, it is therefore very obvious that competency would be achieved (Davic *et al,* 2009).

Using ICT equipment in teaching and learning process creates new pedagogies and new strands to teachers in education. This might require management skills by the teachers to develop new innovative methods of using ICT to enhance teaching and learning to encourage students' participation in classroom activities.

If all the necessary apparatus needed for effective teaching of ICT are put in place, students will be more creative because with the skills they acquired a lot of individualized instructions would be done by themselves while teachers will serve as supervisors or facilitators.

Introduction of ICT into classroom situation (teaching and learning) will enhance the teachers' usage of information technology so, when it is accepted as an important instructional material that supports change in the pedagogical approach. This is also applicable to students who should embrace change to motivate and enhance their understanding of ICT Teachers need new approach in their roles and preparation of teaching courses and as such should be ready to learn as to enable them develop appropriate applications that would add value to the learning of their courses and should be continuous practices to achieve the required competence. Teachers would identify that computers reduce stress, thereby providing authentic results due to exposure to the screen of the computer. Work evaluation would be achieved at the shortest time to enhance productivity Lankshear & Snyder (2000) confirmed that if the teaching of computer technology is adopted early, students would be resourceful and overcome many barriers to make things work-out.

Teachers are use to the traditional method of teaching and learning and as such intimidated by the change which technology might bring. Students and teachers need support and motivation by the school administrators to effect this new change; some are also perplexed due to the new equipment and how to control students in the classroom situation. Olakechim (2007) supported the fact that teachers who engage in appropriate professional development, however, learn how to manage their classrooms effectively and use the new technology to create a more stimulating learning environment.

The worst barriers teachers have in the use of computers and other ICT is known as technophobia, which means not participating in acquiring the skills for teaching and learning process in the classroom. However, inadequate time in the class also affects teachers planning schedules. Teachers identified infrastructural problem, lack of computer in working condition, unreliable

electricity and access to internet its application and so lack of expertise in using information and communication technology as the major problems affecting the advancement of ICT in most secondary schools.

Aliyu (2000) in Amadi, Enyekit (2010) viewed business education as training in business skills which are required for use in business offices, cleric occupation and business policy analysis. Quality business education is vital in programme of service delivery in the economic vision of 21st century. Fadare (2007) asserted that when those who read other courses will be searching for jobs, jobs and business opportunity will be looking for the business education graduates.

Conclusion

Development in Information and Communication Technology for teaching and learning is a welcomed idea. This can boost learning activities in so many ways if ICT is available for use by teachers and students. Various types of computer networks can facilities collaborative work among teachers and students to enhance their academic work. *Technophobia* is another problem which requires immediate attention because teachers serve as the supervisors or facilitators and require training and retraining. ICT facilities will enable teachers to communicate effectively with their counterpart during any competitive seminars or quizzes within the school system. To achieve this, a well articulated ICT policy should be put in place and strictly adhered to. Computing equipment and other major courses should be made affordable to scholars and teachers. These measures will go a long way in enhancing teachers' interest and commitment to the use of I.C.T in teaching and learning processes in the school environment.

Correspondence
Amadi, E.A.
Department of Business Education
Faculty of Technical and Science Education
Rivers State University of Science and Technology, Port Harcourt

Mekuri Ndimele, J.A
Department of Business Studies
University of Education, Port Harcourt

Aleru, G.E.
Community Secondary School
Nkpolu-Oroworukwo, Port Harcourt

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