

IMPLICATIONS OF INFORMATION AND COMMUNICATION TECHNOLOGY FOR TEACHER EDUCATION IN NIGERIA

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Abstract

The success of any quality educational programmes and practices depend mostly on the teacher who plays a major role in the teaching - learning process. This paper examined the importance of information and communication technology in educational institutions especially with regards to teacher education programmes. The effective use of information and communication technologies will enhance the effectiveness of the would-be teachers and even the professional teacher itself. Some challenges facing the integration and the use of information and communication technology in teacher education institution includes, lack of trained and resourceful teachers, poor funding, lack of interest on the part of the government, lack of ICT facilities, just to mention but a few. The paper accordingly recommended that teachers in teacher educational institutions like Colleges of Education and institutes of Education in Universities etc should be sent for in-service training on how to use these modern technologies (ICT) as to improve on the teaching – leavening processes, and also government should consider it a policy to adequately fund teacher education programmes in the country.

Introduction

The teachers are major actors in the teaching and learning equation as well as the translation and interpretation of educational programmes (Adebule 2008). While teaching is an act and a process that provide the stimulus on which the learner does not only accumulate knowledge and technical skills but also develops wholesomeness with desirable attitude and insights for an over all good life. It is therefore necessary for teachers to be adequately trained in all ramifications as to face the challenges of teaching profession.

Teacher education according to Achuonye (2004) is the pre-planned and articulated set of events and activities which are intended to help the would be teacher acquire appropriate knowledge, skills, the right kind of attitude, habit and competencies needed to enable him/her enters into the teaching profession and become resourceful, effective and efficient teacher.

Teacher education provides the specialized training for would-be teachers to enable them acquire the pedagogical and methodological skills, competencies, attitudes and abilities needed for effective teaching. It includes all the instructions, programmes of activities put in place in order to produce highly professional teachers who will be fit to the hectic teaching assignment or duties (Chikwe 2008).

Today, we are living in a knowledge-based society and knowledge-based global world where knowledge is a great power, economy and strength of an individual, and the asset of a nation. It is also true that these are in tremendous explosion in its quality as well as growth. Teacher education programme in Nigeria is in need of new technologies to have access and proper use of this test growing knowledge. Moreover, a mere acquisition of knowledge is not enough. We have a complete access and mastery over the knowledge getting process. It can only happen with the assistance of the science of information and communication technology. The information and communication

technologies are a combination of hardware and software media and delivery systems. In addition they have some digital; and the examples are:

- Digital video camera
- Multimedia personal computer (PC) lap top and note book.
- Idea of virtual classroom and virtual reality
- Computer – mediated conferencing - video and audio conferencing
- E-mail internet and world wise web (www)
- Digital libraries and so on.

The question remains what is the state of teacher education programmes in Nigeria?

Importance of ICTs in Teaching Learning Process

ICTs can play the same role in our information and communication process and their outcomes as played by other technologies in making our lives quite comfortable and purposeful. As a result, they have become quite popular in work of our life. The ICTs have brought a revolution in the field of business, industry, insurance, banking, agriculture, medicine, transport and telecommunication service organization and various other fields affecting our day – to- day activities (Mangal & Mangal 2009).

ICTs have fundamentally changed the way we think, communicate and do most of the things. The field of education is no exception. Here, their use has a tremendous potentiality of serving its cause and helping the persons connected with the processes and product of education in many ways especially in teacher education. The would be teachers get sufficient help from ICT in their learning process. They are expected to get their require opportunities and training for receiving and using information for their self-improvement.

ICT may help the-would-be teachers or students teachers to satisfy their urges or curiosity, inventiveness, construction and so on. They get acquainted with relevant sources of information, the ways and means of extracting required information, methods of information processing.

The training received in proper decision-making and problem solving may enable them to bring necessary changes in their behaviour.

Most of what the trainee teachers acquire in terms of knowledge, understanding, skills, interests, attitude and appreciation is received through the process of information and communication controlled by ICT.

It also help them get self-placed auto-instruction related to the curricular and on curricular areas of education. The precision, speed and accuracy in receiving, transforming and using information and communication is well acquired through ICT as they become acquainted and trained for handling well the sophisticated electronic appliances, software and techniques used for information and communication purposes.

ICTs and Teacher Education

Teacher education exist for the training of would-be-teachers who are suppose to be knowledgeable enough to be able to teach effectively in our schools. The transmission of these knowledge is done efficiently and effectively through information and communication technologies such as Digital video camera, media projector, Digital libraries, E-mail and internet just to mention but a few. But teacher education in Nigeria today do not have all these in the schools and as such the graduates they produce do not know and cannot use these information and communication technologies in teaching learning situations.

Challenges

a. Untrained And Inadequate Teachers

Teachers who man the educational sectors of the country at different levels especially teacher education level have little or no knowledge of information and communication technology. Personal experience shows that some teachers in the teacher education sectors are still computer illiterates and cannot use the internet facilities provided by the schools in teaching the students at this time of knowledge globalization era. At times, the trained teachers are in short supply, and the students suffer a lot resulting to producing teachers who cannot also use information and communication technologies in imparting knowledge to learners.

b. Poor Funding

Teacher training institutions where most of our teachers are prepared and trained for the teaching profession are poorly funded. The government of this country pay little or no attention to the running of teacher education in the country. Amakiri (1996) opined that institutions where professional teachers are trained such as teacher training colleges, Advanced Teachers Colleges of Education, Institute of Education of Universities, National teachers institute and various teachers centres, funds are required to service teaching, research, students welfare, infrastructural development (classrooms, lecture halls, laboratories) purchase of equipment, staff training and development etc. These are in short supply and some of the teacher training institutions do not have computer laboratories, No internet facilities, media projectors, Digital camera's, Digital libraries and so on. These therefore, indicated under funding of these teacher training institutions by the government.

c. Decline in Nigeria's Preparedness to Participate in and Form ICT Development Globally

According to Ololube (2009), in a recent study conducted by the global information technology (2005), the report used the Networked Readiness Index (NRI), covering a total of 115 economies in 2005 – 2006, to measure the degree of preparation of a nation or community to participate in and benefit from ICT developments. Nigeria was ranked 90th out of the 115 countries surveyed. United States of American topped the list, followed by Singapore, Denmark, Iceland, Finland, Canada, Taiwan, Sweden, Switzerland and the United kingdom and so on. Also, Nigeria was ranked 86th out of 104 countries surveyed in 2004 (Global Information Technology 2004). This shows a decline in Nigerians preparedness to participate in and form ICT development globally.

Fundamentally, the slow access to basic ICT equipment, low internet correctively and computers, and the inadequacies in the use of audio visual materials and its equipment including fibs, slides, transparencies, projectors, instructional television and so on in teacher education programs are barriers to the effective and professional development of teachers in Nigeria (Ololube, 2006).

d. Integration of Information and Communication Technologies ICTs and Teaching Program

In recent times the integration of information and communication technologies (ICTs) in university teaching and particularly in teacher training programs has been the topic of much debate (Larose, Dirand, Karsenti, Vincent, Lafrance and Cantin (1999), because educational systems around the world are under pressure to use the new information and communication technologies (ICTs) to teach students, knowledge and skills they need in the 21st century. Teacher education institutions are faced with the challenges of preparing a new generation of teachers to effectively use the learning tools in their teaching practices (UNESCO, 2002).

Recommendations

Government should fund teacher education institutions adequately so that these ICTs equipment will be in use in the schools.

If teacher education is to meet up the major challenges inherent in pedagogy and human management taking cognizance of technology emancipation, concerted efforts must be put in place to refocus the teaching and learning process towards embracing information and communication technology (ICT) in teaching – learning process.

Conclusion

The role of information and communication technology in teacher education cannot be over emphasized. The would-be teachers will get sufficient help from ICT in their task of teaching. Their acquaintance with the relevant sources of information in the form of books, journal and other reading materials, audio-visual material, equipment, electronic and telecommunication media makes them able to acquire necessary teaching – learning materials and techniques which would lead to effective teaching and learning process. Therefore, teachers should go for in-service training on how to operate and manipulate these teaching technologies for effective teaching in teacher education institutions.

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