

Chapter Sixteen

ON DEVELOPING ICT RICH CURRICULAR FOR ENGLISH LANGUAGE TEACHER EDUCATION PROGRAMMES IN NIGERIA

Felicia N. Ene.

Abstract:

The twin forces of technology and communication have dominated the entire world since the past century. The force has resulted in a world driven and directed by Information and Communication Technology (ICT). This force is reshaping the whole world activities. The education system is not left out. Educational research has shown that ICT has massive effect on the education system. ICT turns out unprecedented volumes of information for teachers and learners from across the globe to people even in remote villages of the world. This paper agrees that a viable education programme must fully incorporate ICT into the system. Being that teachers are at the nexus of the education system, it becomes imperative that ICT should be built into the curricula of the teacher preparatory institutions so that they can carry it along to their students inside the field. English Language pre-service teachers in particular need to be exposed to an ICT rich curricula to help them function more properly in the field. It is particularly important since English is the language of education as well as globalization. Teacher preparatory institutions could assist the pre-service teachers of English to learn Computer Assisted Language Learning (CALL) methods of presentation and practice in the delivery of lessons. Above all, because English is the language of instruction in the school system in Nigeria, English teachers, if well trained, will turn out sound students who will function properly in the society. The position of this paper is that teacher preparatory institutions should develop ICT rich curricular to be integrated into the English language teachers' curriculum so as to equip them better for the challenges facing service delivery in the 21st century.

Key Words: Information and Communication Technology (ICT), Curriculum.

Introduction:

The world today is information driven. Progress in the field of ICT has exerted pressure on the society and the entire world is facing new challenges as well in the various areas of life. Emphasis is shifting away from the 'natural resource based economic model to that of knowledge based resource model'. This has become the new approach to wealth creation throughout the world. The result is a technology driven, globalized, competitive and competency based society (Nzewi 2009). According to her, one major problem and task facing the education planners and policy makers today is how to improve the quality of education offered to the citizenry as a response to the challenges posed by ICT. The implication of this is that the education system should be reviewed to re-address the content and method of education delivery. (Ajadi 2008; & Nzewi 2009). No doubt, the place of technology in teaching and learning is occupying centre stage as far as the issues of contemporary Nigerian education are concerned. ICT has globally revolutionalized and changed the world of teaching and learning and Nigeria cannot be left out.

Nature of ICT:

ICT has been variously defined by both technologists and educationists alike. ICT has been defined as the use of computer system, internet and telecommunication equipment in information processing. According to Ayo (2001), ICT means the acquisition, processing, storage and

dissemination of vocal, textual, pictorial and numerical information by a micro- electronic-based combination of computer and telecommunication. Francis in Awotua –Efebo, (2006) sees ICT as having the following characteristics:

- Information Capture (gathering and Collecting data)
- Information Storage (ability to retain data)
- Information manipulation (processing)
- Information distribution (the ability to transmit information electronically).

ICT technology is seen as encompassing many things. It includes gaming software, video technologies, Web pages and many more yet to emerge (Richmond 1997). A great educationist examines it from the functions of the different component parts - information technology and communication technology. To Nzewi (2009):

Information technology consists of the use of electronic processes for storing information and making it available for users. In short, it can be used as a catch phrase to describe a range of technologies for gathering, retrieving, processing, analyzing and transmitting information from everywhere anytime. While communication, which is a major component of ICT is a process by which people exchange information or express their thoughts and feelings. ICT could be seen as the handling and processing of information by means of electronic and communication devices such as computers, cameras, telephones, etc. It is also the collection, processing, storage, dissemination, retrieval and use of information for decision making, planning, operating and controlling public enlightenment and entertainment.

Information is a very important element of development. It helps to assess situations and to notify those concerned, to reduce uncertainties and give clear options about possible alternatives. That is why information is said to be power.

ICT in education:

ICT through its several applications has featured in various aspects of life. It is used in offices, commerce, banking, medicine, law, politics, to mention just a few. In education, ICT has a lot to contribute through its capacity to access the most up to date texts through the virtual library for its hardware, software being used as course materials. Leu, Coiro and Cammack-Olcott (2004), believe that the most essential ones for schools to consider, cluster around the internet that allows students to exploit the extensive information that are available in an on-line networked environment. But ICT has done more than that. More researches in education have proved that ICT has influenced and improved teaching and learning in many ways. Richmond (1997) identified three major areas Information and Communication Technology ICT can influence learning across the curriculum as:

- Presentation, demonstration and the implementation of data using productivity tools
- Use of curriculum specific application types such as educational games, drills and practice simulations, tutorials, virtual laboratory, visualization and graphic representations of abstract concepts, musical compositions and expert systems.

- Use of information and resources on CD-ROM or online such as encyclopedia, interactive maps and atlases, electronic journals and other references.

This means that using ICT, trained teachers can exploit, process, store, retrieve, select information, and use this for presentation, teaching and practice of lessons in or out of the classroom. ICT has helped and is still helping in the growth of education. Some factors have hindered the growth of ICT in education. These are major challenges facing the effective use of ICT in schools. The most daunting one is the lack of skill in handling ICT materials. Nzewi (2009) summarized them as:

- **Teacher factors:** Many teachers are yet to be trained on ICT. Many teachers are resistant to change and have found it difficult to embrace ICT. Some are ignorant of the innovations ICT has brought to teaching and learning. Others perceive ICT as too difficult to learn and therefore hold tenaciously to their old ways.
- **Irregular power supply:** Most of the tools for ICT, because of their encoding properties need constant electricity as the source of power.
- **Weak infrastructure:** Computer equipment is made to function with other amenities eg electricity under controlled conditions. But power supply in Nigeria has been epileptic. This has caused a lot of damage to computer systems.
- **Lack of skills:** Many Nigerians are still computer illiterates. The human skill and knowledge needed to fully integrate ICT into teaching and learning are lacking. Teachers do not have the requisite training in the integration of computers into classroom teaching.
- **Limited access to the internet:** Internet providers are very few and the cost of such services too high for many Nigerians to afford.
- **Lack of relevant software:** There is a dearth of relevant software that addresses issues peculiar to the Nigerian education system.

The list is not even exhaustive. But despite all that problems, the education system is still willing and ready to avail the opportunities inherent in ICT use in education. It has been included in the national curriculum of the teacher education institutions.

The coming of ICT into operation has brought a great transformation in the curriculum. School curricular has been modified specifically to reflect the ICT content in order to equip the teacher and the learners with the basic knowledge of ICT. Also ICT has become a vehicle through which school curriculum is implemented effectively especially in enhancing effective instructional process (Nzewi 2009). It becomes necessary to look at teacher preparation programmes.

Teacher preparation:

It is important that teacher education programmes be tailored to meet with the challenges of the 21st Century. Pre - service teachers ought to be given special attention especially in the new information age. Oduah (2009) maintains the opinion that the curriculum of the teacher education program should be prepared in such a way as to equip teachers for the challenges of the 21st Century. If the National Policy on Education for this country stipulates that higher education institutions in Nigeria will continue to apply the global vision on the development of higher education curriculum with its emphasis on the inculcation of generic skills, the aim of which is to prepare the students both for the world of work and to meet the demands of the

learning society of the 21ST Century, then it behoves more on the teacher education institutions to even do more in terms of inculcating generic skills such as ICT into their products since they are going into the world to teach, guide, lead and influence their students. Therefore the information and communication technology ICT in its various manifestations (both as a discipline, as a tool for teaching, learning and managements and as a way of life) has to be incorporated into the curriculum of pre-service teachers. In Nigeria today, the following institutions have been mandated to carry on the professional training of teachers provided they continuously meet the 'required minimum standards' (FGN, 2004):

- A. Colleges of Education.
- B. Faculties of Education in the universities.
- C. Institutes of Education.
- D. National Teachers' Institute (NTI).
- E. Schools of Education in the Poly techniques.
- F. National Institute for Nigerian Languages (NINLAN)
- G. National Mathematical Centre.

The above mentioned teacher education institutions are expected to operate above 'the minimum standard' as stated by the national policy on education. The implication is that they should prepare teachers who will perform up to expectation in a world that is fast changing bearing in mind the role of the teacher in a changing society. The teacher should be in the vanguard of the change.

The pre-service is structured to provide a 3-year programme leading to the award of the NCE in the Colleges of Education and a 4-year programme leading to the Bachelor of Education (B.Ed.) in the Universities. There are also postgraduate programmes leading to the award of Master of Education (M.Ed.) and a Doctor of Philosophy (PhD) in education. The aims of pre-service teacher preparation, according to the FGN (2004) are:

- To provide highly motivated, conscientious and efficient classroom teachers.
- To create a spirit of enquiry and creativity in teachers.
- To help teachers to fit into the social life of the community.
- To provide teachers with the intellectual and professional background adequate to changing situations.
- To enhance teachers' commitment to the teaching profession.

The national policy further states that 'All teachers in educational institutions shall be professionally trained and that teacher education programmes shall be structured to equip teachers for the effective performance of their duties.' It also states that since no education system may rise above the quality of its teachers, teacher education shall continue to be given major emphasis in all educational planning and development. This means that enough attention must be paid to all necessary changes. Such a change is the ICT which is now sweeping across the globe. ICT is a skill as well as a vital tool and a strong catalyst for sustainable education and human development. This underscores the need for ICT literacy curriculum in the training of teachers who are going to teach others. The ICT requirement is especially important for English Language teachers because English Language carries the burden of the national and international

currencies of communication. There is urgent need to entrench this vision in the teacher preparation framework for the new teachers of English.

That is why the International Reading Association (IRA,2002), which is a body concerned with the propagation of English Language generally and reading in particular in their position statement believes that much can be done to support students in developing new literacies such as ICT that will be required in their future. It stated categorically that students have a right to:

- Teachers who are skilled in effective use of ICT in teaching and learning.
- A literacy curriculum that integrates the new literacies of ICT into teaching and learning.
- Instruction that develops the critical literacies of ICT which is essential to effective information use.
- Opportunities to learn safe and responsible use of ICT.
- Equal access to ICT.

Of course it goes without saying that if our students will become fully functional in today's world they must be literate in the use of ICT. So teacher preparation institutions must fully integrate this technology into the literacy curriculum by infusing enough doses of ICT into the curriculum. This requirement is of special importance for English Language pre service teachers. This is because English is the language of communication and instruction and much of the progress by the students will be dependent on their proficiency in the language in ICT use. It is pertinent to note that teachers are at the centre of the education system. They have better knowledge of the curriculum, classroom programmes, students educational and information deficiencies, abilities and needs and also the resources and strategies needed to address them. English teachers are therefore indispensable in the development of ICT literacy among the students. Teacher training programmes need to include more ICT based skills in other to enrich their curriculum.

Teacher education programmes for teachers of English should consider bringing their special area of expertise to the study of ICT in order to address certain issues such as:

- What new literacy skills are required by new forms of ICTs?
- How can we best support our students to acquire these new literacies?

Based on the above, the IRA (2002) made the following recommendations:

- Integrate effective instructional models that use the internet and other technologies into preparation programmes in literacy education.
- Show pre-service and in-service teachers through practice how the new literacies of ICT are essential components of the literacy curriculum.
- Provide opportunities for pre-service teachers to practice the use of ICT.
- Include online resources in the teachers' instructional programmes.
- Advocate that higher education institutions acquire and make available technology resources for use in pre-service education classes.

These recommendations of IRA are timely because most graduates can neither read nor write well. Many get displaced in the society when confronted with the challenges of ICT. Therefore the quality of teacher education should tally with the challenges students face /meet outside the

shores of their institution of higher learning. Considering the challenges they get at their work places when they graduate, one realizes that there is urgent need to equip our students now for the future.

Because of the importance of providing technology in the classroom, IRA (2002) urges teachers to:

- Take full advantage of professional development opportunities in technologies such as the internet.
- Systematically integrate internet and other ICT in thoughtful ways into the literacy curriculum, especially in developing the critical literacies essential for effective information use.
- Explore the instructional strategies and resources developed by other teachers of the net.
- Provide equal access to technology for every student in your classroom.
- Regularly read professional publications such as books, print journals and on-line journals to stay current on the research on the practical ideas of using technology to improve students' literacy learning.
- Join professional electronic mailing lists to exchange insights about effective instructional strategies.

Use of ICT in Language Teaching.

English is a world language. In addition, it is the language of education. Its importance cannot be overemphasized. It is the language of the super highway. English carries the weight of information as well as communication. There is every need to develop and integrate a rich ICT programme into the curriculum of pre-service English language teachers. These teachers, apart from knowledge acquisition, should also explore further ways of applying ICT in the classrooms.

Various aspects of language teaching have been enhanced by the use of ICT. The writing skill is now better done by using the computer that corrects errors and provides immediate feedback. Computer Assisted Language Learning (CALL) provides a veritable instructional technique with several applications in English Language instruction. Also the teaching of audio-aural skills such as listening, reading and other interactive skills can very well be taught with digital laboratories. Phonological features of English language involving primary and secondary articulation, phonation types, nasalization, aspiration, rhyme and stress, tone and intonation, minimal pairs and phonological look alike, syllable-timing, stress-down drift, stress-up drift etc are now better processed, taught, appreciated, experienced and illustrated by ICT-based tools in language laboratories (Emenanjo in Udensi 2006).

It is important that the pre-service teachers of English should be able to access the various opportunities available for them. They should learn how to use ICT to present and or demonstrate their lessons, thereby becoming more effective. They should explore the options of suitable educational games, drills and practice simulations especially for difficult concepts and structures. They can get the model for pronunciations and intonations and play them as CD-ROMS. It is important that the pre-service teachers of today become better prepared to meet the students who may already be knowledgeable in the use of ICT. It will be very unfortunate if the teacher is ICT illiterate.

Conclusion:

Every branch of knowledge makes use of language as a tool which they must use. It is now obvious that language skills can be better taught using ICT tools and equipment. It therefore

becomes very necessary that the curriculum for training the language teacher must have ICT integrated into it. This will help the language teacher to be relevant and up-to-date in today's ICT dominated world. In this information age, it is very essential to prepare students for this new literacy demand which is vital for the acquisition of knowledge. This is the duty of the teacher. Nobody can give what he does not have. Therefore, pre-service teachers' curriculum must incorporate heavy doses of ICT. This is particularly important for English language teachers because English is the language of communication as far as ICT is concerned as well as for education in Nigeria.

Recommendations:

- a) Older teachers should be sent on in-service training to keep abreast of developments in teaching and learning (Assimonye 2007) and to clarify and modify teachers' attitude, behavior, skills, knowledge and effectiveness in meeting students' needs, their personal needs and school needs.(Arubayi,1992).
- b) Both pre-service & in-service teachers should be trained on modern uses of information technology in teaching and learning.
- c) Training in the information and other resources should be provided in the curriculum of teacher education.
- d) An enriched programme of information literacy and information use have to be formulated in which the regular provisions of information literacy education must be entrenched. ICT should be treated as a core subject for students until graduation. Teachers of English should be trained on how to use ICT in teaching aspects of the language.
- e) ICT is a powerful tool for the development of teaching and learning. It is a catalyst for radical changes in existing school practices. ICT can be applied to bring about far reaching success in service delivery in the education sector.

References

- Ajadi, T. O., I. O. Salawi & F.A. Adeoye (2008). Learning and Distance Education In *Turkish On-line Journal of Education Technology (TOJET)* 7, (4).
- Arubayi, O. (1992). Training and Development for in-service teachers. *Years of Educational Technology in Nigeria*. 3, (1).
- Assimonye, A. C. (2007). Attitude of Teachers to In-service Training: *Journal of Education for Professional Growth*. 3 (1), 68-75.
- Awotua- Efebo, E.B. (2006) Information Technology: Fuel for Development. A seminar paper presented at the Committee on Science and Technology Week. Port Harcourt Rivers State Government.
- Ayo, C.K. (2002). *Information Technology: Trends and Applications in Science and Business*. Lagos: Concept Publications.
- Coiro, J. (2003). Reading Comprehension on the Internet: Expanding our understanding of Reading Comprehension to encompass new literacies. *The Reading Teacher*. 56.458-464
- Federal Republic of Nigeria (2004).*National Policy on Education*. Lagos: Federal Ministry of Education.
- Newark,D.E.(2002). Integrating literacy and technology in the curriculum: A Position Statement of the International Reading Association.

- Leu, D.J.; Kinzet, C. K.; Coiro, J.L. and Cammack, D.W. (2004) Towards a theory of literacies emerging from the internet and other information and communication technologies: Theoretical models and process. *International Reading Association*. 5 (2).
- Nzewi, Uche (2009). *Information and Communication Technology (ICT) in Teaching and Learning In Curriculum Theory and Practice*. CON Book Project.
- Oduah, B. (2009). *Technology in Education in Nigeria*. Ondo, Ken Books & Publishing House.
- Richmond, R. (1997). *Integration of technology in the classroom: an instructional perspective*. SSTA Research Centre Report. <http://www.ssta.sk.ca/research/technology/97-02ihm/>
- Udensi, U.J. (2006); 'ICT: Its role in Language Teaching and Learning'. *Nigerian Journal of Professional Teachers*, 1 (3) 121-124.