

# APPLICATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) AS IT RELATES TO LANGUAGE EDUCATION.

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## **Abstract**

This paper seeks to make clear the concept of Information and Communication Technology (ICT) giving a clear understanding of the importance and advantages of the ICT as a whole and in language education in particular. The paper also clarified the concept of language education and discusses in detail how ICTs can be applied in the area of language education. The paper also highlights some misconceptions that people have in the use of the terms ICT and IT in language education. The paper concluded by recommending that teachers and students alike should be ICT empowered to enable them achieve maximum success in education.

## **Introduction**

The world is fast becoming a global village. Globalization can be seen as the monumental changes that are occurring in the information and communication technology. As Maikanti (2007:412) puts it, *The recent link of all socio-cultural, political and economic advancement of the world through the Information and Communication Technology (ICT) can be referred to as globalization.* According to Khor (2000:11), *Globalization is a phenomenon that affects or includes the whole world.* It is the defining process of the present age which is facilitated and influenced by technological developments such as modern information and communication technology”.

In this era of globalization, the importance of applying ICTs in language education cannot be over-emphasized. In the area of language education, there is a lot to benefit from the use of ICTs. These days, new methods of teaching and learning languages have been developed with the use of these new technologies and the old method of teaching/learning is gradually fading away. Akinola and Olaosebikan (2007:232) puts it better by stating that *emphasis is gradually being shifted from the traditional chalk and chalkboard/paper and pen approach ..... to the use of ICTs in language education.* Presently, using ICTs in language education offers new techniques which promotes language teaching and learning. According to Coghun (2000) Cited in Akinola and Olasebikan (2007:234), “These new technologies allow for academic practitioners to move from being “eggs on the stage” into the role of “the guide on the side” and assist students in gaining the skills and abilities required to acquire and utilize knowledge contained in various forms around the world”. However, despite the technological revolutions taking place in our world today and the wonders that can be utilized from the use of the various ICTs, many teachers as well as

students have refused or are not able to avail themselves of the opportunities presented by these ICTs in education in general and language education in particular in processing information and enhancing language teaching and learning. It is the thrust of this paper, therefore, to discuss the opportunities found in the application of information and communication technology (ICT) in language education.

### **Information and Communication Technology (ICT)**

According to Hornby (2006:738), “Information and Communication Technology (ICT) is the study of the use of computers, the internet, video and other technology as a subject at school.” Wikipedia, the free encyclopedia (2008) defined it as “an umbrella term that covers all the technical means for processing and communicating information. It defined a broad range of technologies, including methods for communication (communication protocols, transmission techniques, communication equipment, media (communication) as well as techniques for storing and processing information (computing, data, storage, e.t.c.)

In time past, the term ICT has been associated only with digital technologies, contemporary or automated technological machines and is most times, wrongly used synonymously with the term computer technology or information technology which are basically different concepts. Wikipedia, the free encyclopedia (2008) made us to understand that ICTs do not only encompass contemporary or automated technological artifacts, digital technologies, computer technology or information technology. It also embraces paper-based writing which is itself a “technology ontologically” and can be included as pre-digital means of generating information (for communication). ICT also embraces the analogue and mechanical systems as well as other technologies such as cell phones, cameras, satellite receivers, media players, game consoles, fax machines, bar-codes in super markets, encyclopedia on CD-ROMS, worldwide communication networks, internet, audio-visual gadgets, overhead / slide projectors, Machine Translation Device (MTD), e.t.c. All these show the extent to which the ICT has enabled the accessing of information to be facilitated.

### **Information and Communication Technology (ICT) and Information Technology (IT)**

Often times, the terms ICT (Information and Communication Technology) and IT (Information Technology) are used synonymously to mean the same thing. These terms do not mean the same thing. They both refer to different things even though they are connected. Wikipedia, the free encyclopedia (2008) distinguished between the two terms. For them, “ICT refers to the computing and communications that support teaching and learning where the focus is on the curriculum subject being taught and not on the technology skills. In other words, ICT is not just about computers, it is a tool to assist

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learning”. On the other hand, IT (Information technology) refers”to the pupils knowledge and understanding of the technology and their ability to apply it. Here, the focus is on technology skills”.

From the above distinction, it can be seen that the ICT and IT refer to different things. ICT is about the tools or equipments while IT is more or less concerned with one’s knowledge or understanding in applying the ICTs.

The Information Technology Association of America (ITAA) as cited in Wikipedia, the free encyclopedia (2008) defined IT as “the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware. IT deals with the use of electronic computers and computer software to convert, store, protect, process, transmit and securely retrieve information”.

The above definition emphasizes the application of these technologies and not the technologies themselves which lends credence to the distinction made by Wikipedia, the free encyclopedia (2008). For the purpose of this study, in talking about ICTs, both the equipments/tools and the understanding or knowledge about these technologies are of concern and will be discussed.

### **Language Education**

Wikipedia, the free encyclopedia (2009) states that “Language education includes the teaching and learning of a language. It can include improving a learners’ native language, although it is most times associated with Second language acquisition, that is, the learning of a foreign or second language”. In effect, when talking about language education, what is meant is the teaching and learning of languages, second languages to be precise, which could be an indigenous or foreign language.

### **Application of ICT in Language Education**

Teaching is an art required for imparting education effectively. Modern effective methods of teaching have been developed to aid learning. Developments in Science and Technology have improved the teaching and learning process. Presently, technological advancements and globalization have given a new face to teaching and learning activities as these technologies facilitate and make easier the teaching and learning process as well as making it more fun. In this era of technological advancements, education in general and language education in particular cannot be excluded from these technological developments which has given education a face lift. The ICTs provide a lot of opportunities to support the teaching and learning of a language in language education. As Wikipedia, the free encyclopedia (2008) rightly noted, these ICTs play a major role in helping teachers and students alike in “accessing information, manipulating data, synthesizing concepts and creatively expressing ideas to others”. ICTs also “supports the development of process skills such as

flexibility, adaptability, critical thinking, problem solving and collaboration which are essential to success in our rapidly changing information age.”

ICTs are powerful and useful tools in improving the teaching/learning process. Wikipedia (2008) listed some ways ICTs come in handy in language education. They include:

1. Developing all four language skills in learners
2. Assist learners to communicate in the target language.
3. Enable communication with people of the target language.
4. Access a range of resources in the target language and identify with the people of the target language communities and countries.
5. Make effective use of and extend existing IT skills and knowledge, e.t.c.

In her submission, Jurich (2001) posited that

“ICTs are used to reinforce pronunciation and habituate the student with the different phonemes, assist teachers in designing their own software according to their teaching styles and students needs, access dictionaries, databases, interactive books and other products, storing data, display visual information, listen to a word or phrase spoken by a native speaker, ensure the rapid transfer of information over large distances, access vast amounts of information stored electronically around the world and maintain electronic conversations with native speakers or other learners through e-mail and chat rooms, or join list-servers to obtain information about new courses”.

Akinnola and Olaosebikan (2007:235) opined that ICTs are used in language education to translate texts from the original version into the target language. They also believe that ICTs ensures the free flow of information necessary for enhancing qualitative teaching and learning of language. Maikanti (2007:412) in his contribution observed that “ICTs promotes increased speed of operation and promotes the theory of learner centered learning and learner autonomy”. Aside these, other uses of these technologies in language education include: making letters, words or signs, writing illustrated books, scripts, e.t.c.. It is also used to get information about writers or authors, publish stories, poems, brochures, e.t.c., getting suitable images to illustrate books, producing books, helping in word building, designing of web page, cutting, pasting and manipulating digital pictures to illustrate own writings. It can be used for drawing, recording spoken stories, interviewing characters, spelling games, help in e-mail dialogues between teacher and student or student and student (i.e learners of the target language and native speakers of target language.) and lots more.

### **What ICTs can be Used and How**

Generally, ICTs are numerous. They include mobile phones, fax machines, computer, cash machines, bar –codes, ATM machines, CD-ROMs machine translation device, cameras, audio-visual equipments, overhead projection devices, Scanners , printers, satellites, internet facilities, e.t.c. In language education, most of these technologies are used to aid teaching and

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learning due some of the functions they perform. Some of these technologies are as follows:

1. Tape recorders which are used to reinforce pronunciation.
2. Customizing, Template and Authoring programs which are computer programs. Some are simple while others are sophisticated programs using multi-media capability. Teachers can use these programs to design their own software.
3. CDROMs which can be used to access dictionaries, data bases interactive books and other products. They can also be used for researching topics, storing data, researching writers and for interactive educational games, e.t.c.
4. Word Processing/Desktop Publishing which can be used in making letters, words or signs, writing illustrated books, publishing stories, Poems, letters, e.t.c.
5. Interactive videodisc which displays visual information. They are read by a laser beam and the sound in a video disc is stored in two different tracks and can be played separately. This offers two different languages for the same content. In some cases, (level iii videodiscs) as noted by Jurich (2001), “the disc player is connected to a computer and controlled through a software program, thus offering maximum interactivity.
6. Graphic organiser for graphic organising.
7. Digital Audio which enables the student listen to words, phrases e.t.c spoken by a native speaker. The words can be repeated by the student into the computer microphone and can also listen as the computer plays it back. This improves pronunciation and listening skills.
8. Telecommunications, e.g Telephone, cell phones, fax. e.t.c assist in the rapid transfer of information over large distances. Infact, Wikipedia, the free encyclopedia (2008) notes that possibilities appear to exist in the use of mobile phone technology to access information, because not only is it voice based, it can be integrated with the information technology (IT) at the server end of a computer network. Going further, Wikipedia states that “In the field of education, people can ask questions through a mobile phone, a database of answers to such questions can be generated using these technologies and that currently what is in Wikipedia and call centers and the text in these databases could be converted into voice, by developing text to voice technology in the various languages. The person seeking the information can be informed when answers are available and better answers sought based on his/her feedback”. It was also emphasized that “the emerging 3G and 4G mobile phone technologies can indeed facilitate such developments. An alternative

- technology could be to integrate the mobile phone with the television screen so that visual information can be viewed easily”.
9. Games which can be used for word building and spelling.
  10. Machine Translation Device which is a computer device used in translation/interpreting texts from the original version into the target language.
- In a nut shell, those devices that can assist us access, present, manipulate and communicate words, sounds and images to help us create meaning are useful in language education.

### **Advantages of Applying ICT in Language Education**

We are surrounded by a lot of ICTs of all kinds which we come into contact with on a daily basis. Presently, things are better done with these technologies than it was in time past. Generally, in education and in language education in particular, these technologies play significant roles in facilitating effective teaching and learning and has a lot of advantages both for the language teacher and learner. First, it grants them the opportunity to have access to different kinds of technologies and develop the skills to use them as well as benefiting from the opportunities it provides in the learning of languages.

Wikipedia, the free encyclopedia listing the merits of ICTs in language learning observes that it helps learners in “Motivation, presentation, questioning skills, problem solving, information handling and techniques of modelling”. Going further, it concluded that “Technology can virtually bring the world to the child providing a depth and richness of instructional approaches to reach children of all learning modalities. The child becomes a “knowledge architect” using resources at his/her fingertips through technology to bring personal meaning and expression to knowledge”. For learners, ICTs make learning interesting, motivational in that it offers a variety of strategies to attract and maintain the students attention thereby keeping them on task for longer period of time (Jurich, 2001) and provides access to a lot of reading material.

Jurich (2001) enumerating the advantages ICTs provide in language learning (2<sup>nd</sup> language learning) for learners states that “ICTs promote multi-sensorial stimuli in that they have the capacity to diversify the delivery of information using visual, auditory and kinesthetic stimuli e.g television and computer related technologies, provides collaborative learning, cultural understanding and self expression”. She explained that “the INTERNET opens new horizons for the foreign language student by facilitating communication with native speakers through e-mail and audio digital conferencing. Radio, television, movies and the internet bridge physical and cultural distances. Students get acquainted with the way of life of people whose language they are learning. Through tapes and multimedia programs, individuals who are shy or insecure can practice the language in a safe environment until they are confident to speak in

public. Those who are creative have venues to explore their talents and curiosity without the limitations of a classroom”.

For teachers, ICTs, according to Wikipedia, the free encyclopedia (2008) help them in “rethinking, teaching and learning strategies, grant them more opportunities for differentiation, gives them greater expectation of their pupils, creates more opportunities for individual teaching and group work and lead to better understanding of their pupils learning”. Finally, ICTs are important to teachers in teaching languages because these technologies come with new kinds of texts which learners need to be taught how to use, view and make appropriate judgments about.

### **Conclusion**

The use of ICTs in language education has a lot of benefits for both the teacher and student. ICTs help people become part of the globalization process and avail themselves of the fastest means of accessing information. ICTs offer a wide range of possibilities which can be harnessed for effective and productive outcomes in learning. A word of caution though for users, ICTs are complementary to man. They assist the teaching and learning process and does not replace them.

### **Recommendations**

Many problems beset the use of ICTs in language education which can undermine the success of language teaching and learning. These problems form the basis of the following recommendations.

1. Many language teachers lack adequate training or experience to use these technologies. They do not even understand these technologies: Teachers should be properly trained to effectively use, manipulate and administer these technologies to students.
2. Some of these ICTs are scarce and very expensive which makes accessibility to them difficult: The government should assist schools in providing these expensive technologies to aid language education.
3. Most schools lack the facility to accommodate such technologies: Schools should setup appropriate facilities such as large laboratories, proper air-conditioning, e.t.c to accommodate these technologies after procurement to facilitate teaching and learning.
4. These technologies are not integrated within the overall lesson plan which may lead to failed outcomes: The curriculum/lesson plan should be organized in such a way so as to give students ample opportunity to get to know, use, manipulate and creatively access these technologies.
5. These ICTs are generated or powered by electricity. The energy supply in Nigeria is poor and does not allow for the full utilization of these ICTs: Schools should endeavour to invest in generators that can supply power to enable these technologies to be used the school.

6. Maintenance of these ICTs is a big problem. Efforts should be made to train and retrain personnel who can service and repair these ICTs.
7. The Nigerian Indigenous languages has no place in these technologies. English is the major language confronting users of these technologies: It is expedient for us as Nigerians to *work out mother tongue equivalence of the new ICT terms* as Ojo (1995:5) suggested.

### **Reference**

- Akinola, F. I & Olaosebikan, O. W. (2007): French language education in the world of globalization: Issues and challenges in Nigeria". *in journal of the school of languages (Josol)*. Adeyemi college of Education, Ondo. 3. Oct 2007. ISSN 1597-104x 231-240.
- Allen, T. & Morton, M.S. (1994): *Information technology and the Corporation of the 1990s*. New York. Oxford University, Press.
- Azubogu, N. C. (2007): ICT: A Catalyst for Effective Library Service Delivery In Imo State. *In journal of Nigerian languages and culture (JONLAC)* 9. (1) March 2007. Published by association for promoting Nigerian languages and culture (APNILAC) 207-213.
- Hornby, A. S (2006): *Oxford Advanced Learner's Dictionary* (7<sup>th</sup> Edition). Oxford University Press. Juric, S. (2001): ICT and the teaching of foreign languages available online at [WWW.TechknowLogia.org](http://WWW.TechknowLogia.org).
- Khor, M. (2000): *Globalization and the South: Some critical issues*. Ibadan. Spectrum books Limited.
- Maikanti, S (2007): The challenges of learning Hausa as a second language in the face of globalization In *Journal of the school of languages (JOSOL)* Adeyemi College of Education, Ondo. 3. Oct. 2007. ISSN1597-104x. pp 405-415.
- Ojo, M. O. (1995): Second Language: An Impediment to Effective Science Learning" *In Tambari journal of education*, 2..(2) Kano FCE, Kano
- Paleologou, N. (2003). Teaching Greek as a second or foreign language through the development and use of educational software". *In European Journal of Open Distance and E-Learning (EURODL)*. Available Online at [www.eurodl.org/materials/contrib/2005/paleogou.htm](http://www.eurodl.org/materials/contrib/2005/paleogou.htm)
- Soska, M. (2001): An introduction to educational technology. Directions in language and education. National clearing House for bilingual education. Available Online at <http://www.nche.gwu.edu/nchepubs/directions/o1.htm>.



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Walker, D. (2000). FM Radio stations: Broadcasting with the Sun in *TechknowLogia* March (2000). Available Online at [www.Techknowlogia.org](http://www.Techknowlogia.org)

Wikipedia, the Free Encyclopedia (2008). Information Technology and Information and Communication Technology. Available Online at [en-wikipedia.org/wiki/InformationTechnology](http://en-wikipedia.org/wiki/InformationTechnology).

Wikipedia, the free Encyclopedia (2009). Language Education. Available Online at [en-wikipedia.org/wiki/LanguageEducation](http://en-wikipedia.org/wiki/LanguageEducation).

Searchio (2004): ICT. Available Online at <http://Searchio.midmarket.techtargget.com/s>

Isda (2008) Mobile technologies and learning Available Online at <http://www.isda.org.uk/files/ipdf/041923ps.pdf>.

The use of ICT in Teaching Modern Foreign Languages. Available Online at <http://www.sip.ie/sip021/teacing.htm>.