

INFORMATION AND COMMUNICATION TECHNOLOGY APPLICATION: A VERITABLE TOOL FOR ENHANCEMENT OF SPECIAL EDUCATION.

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Abstract

Rapid changes in technology have brought into focus the issue of information and communication technology application in all sphere of life. Some children have learning difficulties and so the ICT special education teacher saw the possibilities with the computer and how it could be used to effectively train pupils with different kinds of learning difficulties. In this paper the meaning of ICT, application of ICT in teaching and learning under special education have been highlighted.

Introduction

In recent years there has been a groundswell of interest in how computers and the internet can best be harnessed to improve the efficiency and effectiveness of education at all levels and in both formal and non-formal settings. But ICTs are more than just these technologies; older technologies such as the telephone, radio and television, although are now given less attention, have longer and richer history as instructional tools. The use of computers and the internet is still in its infancy in developing countries, if these are used at all, due to limited infrastructure and the attendant high costs of access. Some children are slow at learning how to read and write. This may be due to several reasons, for example low maturity level, difficulties with concentration, or specific reading and writing difficulties that is so called developmental reading and writing difficulties. The most common way to deal with this kind of difficulties has within the school system traditionally been to let the child practice the parts that the child experience difficulties with. Despite intensive training, for some pupils the difficulties will not abate, and therefore the pupils may get tired and give up. With a feeling of failure and low self image as a consequence. The special education teacher saw the possibilities with the computer and how it could be used to effectively train pupils with different kinds of learning difficulties. It was within special education that the computer first started to be used as an assistive device to compensate for reading and writing difficulties. The computer, together with other digital technology used to compensate for different difficulties have still not reached the classroom to the full extent.

Meaning of ICT

ICTs stand for Information and Communication Technologies and is defined as a diverse set of technological tool and resources used to communicate, and to create, disseminate, store and manage information. These technologies include computers, the internet, broadcasting technologies (radio and television), and telephony.

The World Bank (2002) described Information Communication Technology as the creation, storage and processing of data including hardware (computer networks, services, storage devices, desktop computers) and system software (operating systems, programming language and software application).

Rahman (2002) defined Information Communication Technology as the technology of creation, processing, storage, retrieval and transmission of data and information including

telecommunication, satellite computer (software), the internet and global system of mobile communication (GSM).

The emergence of Information Communication Technology (ICT) in education has transformed teaching and learning to a more viable and effective method and would likely set the standard for the 21st century.

Meaning of Special Education

The National Policy on Education (2004) defines special education as the education of children and adults who have learning difficulties because of different sorts of handicaps which includes: Blindness, partial sightedness, deafness, hardness hearing, mental retardation, social maladjustments, physical handicaps, etc, due to circumstances of birth, inheritance, social position, mental and physical health pattern or accident. As a result, a few children and adults are unable to cope with the normal school class organization and methods.

There are also the special gifted who are intellectually precocious and find themselves insufficiently challenged by the programme of the normal school and who may take to stubbornness and apathy in resistance to it. Special education includes instructional and related services specifically designed to meet the educational needs of students with disabilities in the least restrictive or normal environment.

The most widely cited definition of special education is that given by Kirk (1972) which sees special education as: Those aspects of education which apply to handicapped and gifted children, and which comprise modifications of, or additions to school practices intended for the ordinary child, practices that are unique, uncommon, of unusual quality and in particular are in addition to the organization and instructional procedure used with the majority of children. Kirk definition is interesting in the fact that it emphasizes that special education is nothing other than modification albeit unique and uncommon, sometimes which are merely additions to the usual organizations and instructional procedures used with the majority of children Obani (1998) in NCCE (1998).

Benefits of ICT in Special Education

The benefit accruing from the application of ICTs in education are of significant importance and implication in human capital development, effective education delivery system and educational programmes enhancement. This is possible by;

- ❑ Providing individualize instruction with an opportunity for developing basic skill.
- ❑ Encouraging individual and group problem solving by providing peer expertise.
- ❑ Allowing individual the freedom to learn according to one's own pace, interest and convenience without any fear and accountability.
- ❑ Providing round the clock accessibility to learning material of on-line and off-line teaching through CD's.
- ❑ Assisting the learner to read in English. For example by using a scanner to scan a printed text and to listen to the text in the computer through a speech synthesizer.
- ❑ Assisting the learner to write in English. For example, the computer programme spell right.
- ❑ Assisting the learner to translate to and from English for example with a handheld scanner pen.
- ❑ Assisting the learner in assessment and record keeping. For example every task each pupils does whether competed or not is saved in the computer to promote continuity and progression.

Recommendations

- (1) There is need for the provision of one computer system to a child in the ICT lab for maximum effectiveness.
- (2) There should be safe use and storage of machines. All equipment are kept clean and free from dust and switched off correctly at the end of each day.
- (3) To make special education to be more effective in Nigeria, administrators parents, families and community be involved in planning, implementation, assessment, monitoring and interventions.

Conclusion

It is quite obvious that the global trend is wheeling round the use of Information Communication Technology ICT in all works of life. In education, information and communication technology is significant due to the enormous potential in reducing the percentage of illiteracy, according educational opportunities to people living in otherwise inaccessible areas, updating existing knowledge and enriching knowledgeable minds.

Effective application of ICT enhances the learning experience for both teachers and students. Although the use of computers and the internet is still in its infancy in developing countries, due to limited infrastructure and the attendant high costs of access, government should as a matter of urgency provide these equipment to stimulate teaching and learning.

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