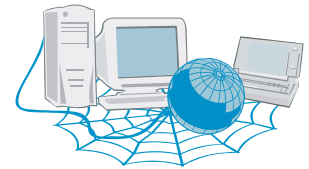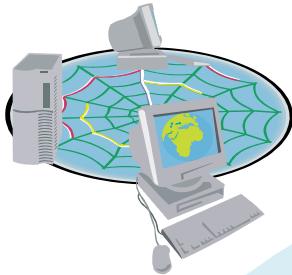# Highlights on The Role of Information Technology in ECWA Education

Paper Presented at

A CONFERENCE OF PROPRIETORS OF ECWA PRIMARY, SECONDARY, AND THEOLOGICAL INSTITUTIONS

by

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Introduction

ECWA came into existence as a result of efforts to take the gospel of Jesus Christ to the interior of the Sudan region of Africa. As most Africans at the time could neither read nor write, one strategy employed by the missionaries of reaching them was the introduction of some form of training in order to make them able to read the Bible. This strategy, along with mercy ministry, is still being used today to reach parts of Nigeria that is still closed to the gospel. ECWA and other mission agencies are not left out in the use of this strategy, leading to the establishment of schools in almost every DCC of ECWA. The desire for better living through western education and the need to train more preachers led to the rapid spread of these schools.

Education

Education is defined by the Oxford Advanced Learners Dictionary as the systematic training and instruction, especially of young ones in schools.... The WordPerfect dictionary sees it as the theory and practice of teaching, giving intellectual, moral, and social instruction. To educate therefore, is the process of acquiring knowledge **by any means anywhere**. Education can either be formal or non-formal.

Formal education is the kind of teaching and learning process that takes place within a school setting with set rules, guidelines and standard curricula. Non-formal education on the other hand, takes place outside the conventional classroom. Curriculum and rules set are specific to location and those involved. Standards, if any, are set by individuals or small organized private groups. Whereas education is a life-long quest, formal education is terminal, terminating at the expiration of the stipulated training period.

Investigations has shown that ECWA education system is formal with curriculum and standards set by the Federal Government, in the case of secular schools or ECWA, in the case of some theological institutions.

Information & Communication Technology (ICT)

Information that does not reach the intended user id of no value, hence the need for the inclusion of communication into Information Technology. For the purpose of this seminar, ICT is defined as a set of tools and resources used to create, store, manage and transmit information. These tools include, but not limited, to computers, the internet, radio, television, print and telephony.

Until recently, the most common technologies used in education are the print (the cheapest and most accessible), radio and television (both used mostly for distance learning). There is, however, a fast growing interest in computer and the internet in relation to how they can be used to improve the effectiveness and efficiency of teaching and learning, both in formal and non-formal education settings.

Uses of ICT in Education

The choice of any technology to be used in education is dependent on the level of the use of such technology and its availability. The different levels of use as identified by Haddad and Draxter (2006) are as follows:

– Presentation

– Demonstration

– Drill and Practice

– Interaction

– Collaboration

The first three of the above can be accomplished with any of the available technologies. However, the trend in education today has shifted form teacher centred to student centred, and hence the need for interaction of students and collaboration of institutions and facilitators of learning. Interaction and collaboration can only be achieved with computer and internet based ICTs. Unfortunately, the use of the internet in the developing world is limited mostly to e-mails, not necessarily related to academics.

Beyond personal e-mails, however, computer based ICT can be used for teaching and learning, This is often referred to as learning with the computer or simply e-Education or e-Learning It is a situation where the student or teacher focuses on how the technology can be a means to facilitate learning across the curriculum, rather than learning the technology itself. It is assumed that the players already know how to use the tools.

The use ICT in education includes:

– The use of productivity tools such as spreadsheets, database management systems, word processor and graphics applications, to prepare and manipulate data to produce

instructional materials and teaching aids.

– The use of curriculum specific applications for simulations, tutorials, visualization of abstract concepts and expert systems.

– Research, using information on CD-ROM or online materials such as encyclopedia and journals.

– Interactions: Students at the same level in curriculum forming discussion groups regardless of their physical location across the globe, thereby facilitating learning.

– Collaborations: Institutions with common interest do not have to replicate resources. This is one way to bring students to the best lecturers in world. Resource sharing is a way to maximize the benefits of the internet. Time and space would not permit the discussion of the importance or telecollaboration and teleconferencing.

Other Uses of ICT in Education

When computers and their networks are not being used in teaching and/or learning, they could be used for other activities that could enhance the growth of the school. Some other benefits of computer based ICT include:

1. Ability to monitor the growth of the school and be able to predict human, materials and financial requirements over time.

2. Efficient staff and student information management.

3. Especially for the tertiary institutions, there would be no logical limit to the size of the school, and by implication, no limit to the number of students a lecturer handles.

4. Ease of comparison and/or update of curriculum.

5. Other administrative duties.

Where are ECWA Schools?

A quick run through most ECWA schools, like most Nigerian schools, shows that our schools are still very much dependent on the print technology, relying very heavily on lecture notes and textbooks that get obsolete even before their release. In advance economy, however, nearly all lecturers have a computer with internet access in their offices. Libraries are equipped with internet ready computers with textbooks, lecture notes, tutorials and assignment, all updated regularly by their authors. Several online books and materials are available on the internet. This way students

have access to updated material all the time and can work at their own pace without stress and so achieve improved performance. This is not the case in our schools. Over 95% of teachers are illiterates, going by the new definition literacy. The are not computer literate, let alone applying it to enhance their performance and facilitate student learning. The few computers available in some of our secondary schools are used mainly for secretarial duties. The few lecturers in our post-secondary schools who are literate only gather information from the internet for personal use. Most of them do not students access to all of these materials, but only a fraction, making the students always dependent on the lecturer, and they, "local champions". That is not academic.

Rather than making students "slaves" to the lecturer, we must make it a priority to help the student participate in the information age. This is very necessary if ECWA must be at the lead of education and remain relevant in our society, thereby attracting more student. Bingham University is already thinking in that direction but yet to start anything.

Where Do We Begin?

We must begin at the very top. ECWA policymakers must develop a framework for the appropriate and effective integration of ICT in our educational system. This must address issues of effectiveness of the technology, planning and curriculum development and maintenance, infrastructure, sustainability and capacity building. We cannot remain in "yesterday". The attitude of "as it was in the beginning, is now and ever shall be" must change. We must move with technology. Our leaders must became literate and then make it mandatory for everyone involved in education at all levels to be the same.

Key Challenges to ICT Integration to Education

Some identified challenges in integrating ICT to education are:

1.   Erratic power supply.

2.   Sustainability

-     Financial

-     Political

-     Technological

3.   Capacity building. Learning new skills requires patience and humility, especially for senior statesmen.

Conclusion

Education is a key component in the achievement of the United Nations Millennium Development Goals (MDGs). ICT has been accepted as an integral part of education and offers opportunities for self discovery and greatly facilitates the acquisition and absorption of knowledge.

ECWA schools are still very far behind. However, a careful and effective introduction and integration of ICTs into our educational system will mark the beginning of bridging the Digital Divide.

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