The Role Of ICT In Educational Development In A Developing Country

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Abstract—ICT is, and will continue to be, a catalyst in advancing and development. New Information and communication technologies (ICT) overcome the barriers of distance and time and significantly improve the accessibility of information and knowledge. As a result, the sharing of information and knowledge quickly and effectively becomes feasible and acts as a key element in achieving development goals and mitigating the impact of unforeseen events such as natural disasters or outbreaks of disease. These paper aims to highlight some of the benefits developing countries can derive from the use and adoption of ICT, as well as some problems they encounter and what the government of these developing countries can do to assist in the implementation of ICT.

Keywords— ICT, e-learning, blended learning, Collaborative learning, WAN, LAN

I. INTRODUCTION

Several definitions have been given to explain and interpret the acronym ICT and the one given below seems to be the closest: "ICT is a generic term referring to technologies that are used for collecting, storing, editing and passing on (communicating) information in various forms." The above definition separates distinct fields of ICT and at the same time limits them together so as to operate as an entity. It is now a fact as evidenced by developments from other countries that as a sector can contribute immensely to the national GDP of a nation and that ICT, acting as an enabler, can result in improved market competitiveness of a nation’s products and services. ICT can impact positively on governance and other sectors of the economy. In turn, ICT can effectively assist international economic integration, improve living standards, narrow the digital divide, and improve biodiversity utilisation and management. The digital divide characterised by highly unequal access to and use of ICT that manifests itself both at the international and domestic level, needs to be addressed by national policy makers. The digital divide can be narrowed, and poverty reduced addressed through effective and focused utilisation of ICT in key sectors such as education, industry, and agriculture. The adoption of ICT requires a business environment encouraging open competition, trust and security, interoperability and standardization, and financial resources for ICT. This requires the implementation of sustainable measures to improve access to the Internet and telecommunications infrastructure and increase ICT literacy, as well as development of local Internet-based content. Most developing countries still depend on content developed and managed in the developed world and as a result substantial costs are incurred while trying to access the content. One of the causes that discourage access to digital information is culture and language difference. Efforts should be made to make ICT available in local languages if they are to be disseminated, adopted and utilised by locals. In general, ICT goals in developing countries should be the establishment of an environment that encourages networking of services and applications; promoting e-commerce and trade promotion programmes for goods and services; promoting Internet access to exchange and access digital content; establishing e-government; promoting e-education and e-learning services; strengthening network security; building and developing e-society and ICT human resources.

ICT And Education

ICT is, and will continue to be, a catalyst in advancing economic growth and poverty reduction. New information and communication technologies overcome the barriers of distance and time, and significantly improve the accessibility of information and knowledge. As a result, the sharing of information and knowledge quickly and effectively becomes feasible.

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 ICT is more than just these technologies; older technologies such as the telephone, radio and television, although given less attention, have a longer and richer history as instructional tools.

For instance, radio and television have for over forty years been used for open and distance learning, although print remains the cheapest, most accessible and therefore most

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