

Chapter 8.10

Forging Partnerships to Provide Computer Literacy in Swaziland

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INTRODUCTION

The challenges facing the world, especially developing countries like Swaziland, are many and varied. The United Nations Development Programme (UNDP) estimates that over two billion people, out of a global population of six billion, do not have access to education. The majority of these people are found in developing countries. As many as 113 million children do not attend school. More than one billion people still live on less than US\$1 a day and lack access to safe drinking water. More than two billion people in the world in developing countries in particular, lack sanitation. Every year, nearly 11 million young children die before their fifth birthday, mainly from preventable illnesses. The risk of dying in childbirth in developing countries is one in 48 (UNDP, 2003). In most developing countries, especially in remote areas, the situation is exacerbated by lack of electricity.

The key solution to most of these challenges is education. More importantly, it is the acquisition of critical knowledge, skills and attitudes

crucial for economic development and growth leading towards the improvement of the quality of life. Indeed, knowledge has been recognized as the heart of economic growth and sustainable development (World Bank, 2002) and it is at the core of a country's comparative advantage (Porter, 1990). Countries endowed with intellectual resources in critical areas have tended to achieve the highest rates of economic growth and have had the fastest growth in science and technology (Iredale, 2003).

A study by the Organization for Economic Cooperation and Development (OECD) on the determinants of growth concluded that underlying long-term growth rates in the OECD economies depended on maintaining and expanding the knowledge base (OECD, 1998). The World Bank Report 1998/1999 noted that most technologically advanced economies were knowledge-based and that comparative advantage among nations was less from abundant natural resources or cheap labour and more from technical innovations and comparative use of knowledge or both (World Bank, 1999).

Invariably, investing in human capital in developing countries would be the most sensible way of creating wealth for economic growth and for dealing with many social and environmental challenges (Iredale, 2003). Investing in human capital will enable developing countries to produce, select, adapt, commercialise, and use the knowledge economy to sustain their economic development and growth and improve living standards of the people (World Bank, 2002).

One of the key drivers of the knowledge economy, economic development and growth is technological development in Information Communication and Technology (ICT) such as electronics, telecommunications, satellite technology, computers, the Internet, etc. This is because ICT has significantly changed the speed of production, distribution, and the use of information and knowledge. ICT has the potential to close the “digital divide” between the North and South and enable developing countries to effectively participate in the global economy. As Peters (2004) points out, ICT is a key weapon in the war against poverty because when used effectively it offers huge potential to empower people. It overcomes development obstacles, addresses their social challenges, and strengthens communities, democratic institutions, a free press, and local economies.

Indeed, investments in ICT have had positive impacts on developing countries’ economic development and growth (World Bank, 2002). For example, an International Labour Organization (ILO) study of some developing countries which had invested in new information and communication technologies found that these technologies had positive impact on their economic development and growth and enabled them to compete in the global market (ILO, 2001).

ICT facilitates government operations and services in health care and information, education and training, employment, job creation, business enterprises, agriculture, and transport. ICT may facilitate protection of the environment, management of natural resources, disaster prevention,

and culture (Dark & Eskow, 2000; International Communication Union, 2003). ICT is crucial in sustaining production and consumption patterns and reducing traditional barriers in society by providing opportunities for people to access local and global markets.

THE CHALLENGE

Unfortunately, ICT is not easily accessible to many developing countries due to several factors such as lack of financial resources to pay for Internet connectivity, purchase computer hardware and software, modems, and maintain them. Also, the infrastructure of copper wire telephone lines is unreliable, the bandwidth for Internet Service Providers (ISPs) is limited, and there is inadequate technical capacity to manage and maintain the infrastructure and equipment. As a result, the number of people connected into the Internet in developing countries is far less than the number of people connected into the Internet in developed countries.

In 2002, for example, of the 332 million people connected to the Internet worldwide, only 1% was found in Africa and less than 5% of the computers in developing countries were connected into the Internet (Naidoo, 2001). Similarly, in 2000 Africa had the lowest (0.25%) number of Internet hosts compared to the other regions of the world such as Oceania (1.9%), Asia (6%), and the Americas. In the same year, the USA alone accounted for 73.9% of the total Internet hosts in the world (Reddy & Manjulika, 2002). In 2001, Nigeria, with a population of over 108 million people, had a negligible Internet connectivity of fewer than 500,000 lines (Naidoo, 2001). In Africa, each computer with an Internet or e-mail connection supports about three to five users. Thus, the estimated number of Internet users in Africa, apart from North Africa and South Africa is between 1.5 to 2.5 million. This is about 1 user for every 250-400 people, compared to a world average

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