ICT in Education in Swaziland

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April 2007

Source: *World Fact Book*[1]

Please note:

This short *Country Report*, a result of a larger *info*Dev-supported *Survey of ICT in Education in Africa*, provides a general overview of current activities and issues related to ICT use in education in the country. The data presented here should be regarded as illustrative rather than exhaustive. ICT use in education is at a particularly dynamic stage in Africa; new developments and announcements happening on a daily basis somewhere on the continent. Therefore, these reports should be seen as "snapshots" that were current at the time they were taken; it is expected that certain facts and figures presented may become dated very quickly.

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Overview

Swaziland is a small, deeply impoverished, drought-stricken country with a weak ICT infrastructure. The Swazi government introduced a draft national ICT policy in 2006 and the country has a very small number of ICT for education programmes under way of which the Computer Education Trust and various programmes at the University of Swaziland are the most known.

Country Profile

Swaziland is one of the smallest, landlocked countries on the African continent. While considered one of the wealthier nations in Africa, it remains one of the poorest in the world. Seventy percent of Swazis live in rural areas. A continuing drought has resulted in a food crisis that threatens hundreds of thousands or people with hunger. The unemployment rate is approximately 40%, and nearly 70% of the population live on less than a dollar per day. Economic growth has wavered in the past few years, exacerbated by the economy's inability to create new jobs at the same rate that new job seekers enter the market. This situation is due largely in part to the population growth rate, which strains the natural resources and the country's ability to provide adequate social services, such as health care and education. Overgrazing, soil depletion, and floods are persistent problems. Largely as a result of having the world's highest rate of HIV infection, Swaziland has the lowest life expectancy on the planet: just 32.62 years. This is expected to drop to just 29 years by the year 2010.[2]

Table 1 provides a brief overview of basic socio-economic indicators for the country.

Table 1: Socio-economic Indicators: Swaziland

Indicator	
Population	1.1 million (2005)
Languages	Official languages: English and siSwati. Other languages: Tsonga and Zulu
2005 Economic activity (% of GDP)	Agriculture: 11.6% Industry: 48.0% Services: 40.4%
Human Development Index	146 (out of 177 countries)[3]
Per capita gross national income (US dollars)	$1,700 (2004); $2,280 (2005)

The Education System

Education and training is divided into four main sub-sectors in Swaziland:

- Early childhood care and development (ECCD)
- Primary education
- Secondary education
- Post-secondary education

Primary education in Swaziland is seven years with the age range from six to 13 years. Parents have always contributed towards primary education by paying school fees and contributing to a building fund (for construction of school facilities). As a measure to reduce the cost burden to parents, the Government of Swaziland now provides free textbooks to all primary school pupils and offers bursaries for destitute and orphaned children. The government is also exploring the possibility of providing primary school pupils with stationery.[4]

Secondary education is divided into two sub-systems: three years of junior secondary and two years of senior secondary.

Post-secondary education consists of tertiary education and vocational education, which is offered by various institutions.

In 2001 there were 723 schools in Swaziland: 541 primary and 182 secondary. Swaziland has one national university as well as teacher-training and nurse-training colleges and a few skills-training institutes.

Swaziland's adult literacy rate for 2000-2004 stood at 80%. The net primary school enrolment was 77% during the same period.

Challenges
AIDS is having a devastating impact on children in Swaziland. An estimated 69,000 children have been orphaned due to AIDS-related causes, and an additional 60,000 are highly vulnerable due to the extreme poverty of caregivers, the sickness of parents, or home situations of abuse and exploitation. As a result of the impact of AIDS, more than one-third of children cannot access basic services, including health, food, education, water and sanitation, and psychosocial support. While neighbourhood care points help many of the poorest and most vulnerable to meet basic needs, they reach only about 20% to 25% of orphaned and vulnerable children. Swaziland's under-five mortality rate, estimated at 74 per 1,000 live births in 1995, now stands at 156 per 1,000.

The plight of children has been further exacerbated by successive years of drought, which have left one-third of the country's children stunted and one-third of the country's population dependent on food aid. The regional food crisis in 2006 will aggravate the situation, further increasing the burden on communities already trying to take in orphaned children.[5]

Infrastructure

The telecom sector in Swaziland features an old-style posts and telecom monopoly operator for fixed services but with private participation in mobile and Internet services. Nevertheless, fixed and mobile penetration is relatively high compared with other countries in the region. While Internet usage is growing reasonably fast, the level of penetration is still well below international standards, but about average in the region. The government is considering unbundling the national operator to create discrete telecom and regulatory entities and later privatise them.

Table 2 provides an overview of the country's ICT infrastructure indicators.

Table 2: ICT Infrastructure Indicators, 2004

Indicator	
Fixed-line subscribers	46.2 per 1,000 persons
Mobile subscribers	113 per 1,000 persons
Dial-up subscribers	19.0 per 1,000 persons
Broadband subscribers	0.0
Internet users	36.0 per 1,000 persons
Television broadcast stations	12 (including 7 relay stations)
Radio stations	AM 3; FM 2; shortwave 3

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ICT Policies

National Development Strategy – Vision 2022
The government adopted a national economic strategy called the National Development Strategy – Vision 2022 in 1997 which articulates development priorities for all economic sectors including education.

The vision of this strategy is that by 2022 Swaziland will be in the top 10% of the medium human development group of countries founded on sustainable economic development, social justice, and political stability. The strategy's vision statement also states that the focus is on quality of life, of which the critical dimensions are poverty eradication, employment creation, gender equity, social integration, and environmental protection, which are in turn linked to education, health, and other aspects of human resource development.

Important elements in this strategy are appropriate education and training (including a move away from the present academic orientation and towards a technical and vocational orientation); adequate incentives extended to businesses and households to encourage the full development of human capital; appropriate youth programmes; special attention to

members of society with disabilities; and all other areas that have an impact on the quality of human capital (health, water, sanitation, shelter, etc).

The National Development Strategy also mentions the need for the "cableway and telecommunications" sector to:

- Improve accountability and performance measures
- Strengthen the implementation of the Public Enterprise Act to attain financial and performance targets
- Streamline the regulatory framework
- Allow competition in the telecommunications industry within a conducive supervisory environment
- Base investment decisions on economic criteria
- Co-ordinate installation of communications infrastructure with national development agents
- Formulate and implement a rational communications policy
- Promote the economic empowerment of nationals by encouraging their participation in telecommunications as owners, managers, and technical operators (with foreign technical partners where necessary)
- Ensure that the telecommunications network is in line with new technological developments abroad

Draft National ICT Policy
In 2006 the Swaziland government developed a draft ICT policy document. The government has appointed a multidisciplinary team to consult with a wide range of stakeholders and ensure integration and linkages to the National Development Strategy.

Current ICT Initiatives and Projects

Computer Education Trust
The Swaziland Computer Education Trust (CET) is a non-profit organisation that was set up 1999 in Mbabane with funding from private business sources within Swaziland to address the poverty of technical education across the country's state school system. Its objective is to extend computer literacy and vocational ICT training to every child in secondary and high school in Swaziland. The computers are intended for use across the whole school curriculum with the aim of future Internet integration in education.

CET facilitates the development of the necessary pedagogical materials and the delivery of professional pre-service and in-service training (INSET) for all Swaziland teachers. CET will install a 20-PC computer lab in each of the 187 secondary and high schools across Swaziland and guarantee their sustainable use by providing full technical and maintenance back-up support facilities. CET has partnered with SchoolNet Africa and the Open Society Initiative for Southern Africa to upgrade its existing Technical Services Centre which serves to source, refurbish, and distribute second-hand computers to Swazi schools.

CET is already directly providing teacher training in ICT and is currently negotiating with the Ministry of Education to integrate this provision within the existing programme of pre-service and in-service teacher training. CET has installed 20 computers in 40 schools and is providing effective maintenance and technical support.

Teachers are given an introductory course in ICT trouble-shooting and comprehensive training in the use of computers in education specifically tailored for the Swaziland education system. Negotiations have begun, and agreement in principle reached, with the University of Swaziland (UNISWA) and the Swaziland College of Technology (SCOT) to incorporate these technical functions within the framework of the curriculum of their existing computer maintenance courses and work experience placements. This will replicate the successful South African model where diploma and degree students are given the opportunity to develop applied skills in computer installation and maintenance while establishing the capacity to deliver computer education in schools. In other words, they will actually install PCs in schools and provide technical back-up as part of their studies.[6]

CET is also a partner of SchoolNet Africa and the Open Society Initiative for Southern Africa (OSISA) with which it has supported the development of a Technical Services Centre to assist with sourcing, refurbishing and distributing PCs to schools. CET has also sourced PCs with the help of Computer Aid International, and it has partnered with the Community Education Computer Society (CECS), a South African-based NGO that focuses on the development of ICT skills in the form of literacy programmes. Swaziland is one of the six participating countries in the 80-hour programme that enables participants to use word processing, spreadsheet and presentation software; design a basic Web page using HTML; and perform basic computer troubleshooting and maintenance.

University of Swaziland
The University of Swaziland (UNISWA) is the only institution of higher learning in the country. It has three campuses situated in Mbabane, Luyengo and Kwaluseni. The university has embarked on a programme for teachers in information technology to ensure a smooth introduction of computer education in schools. It also has an ICT centre and an Institute of Distance Education which has joined the Virtual University for the Small States of the Commonwealth initiative.

For more information: www.uniswa.sz

Implementing ICT in Education: What Helps and What Hinders?

Table 3 provides a summary of the current stage of ICT development in Swaziland in terms of enabling or constraining features in the education system.

Table 5: Factors Influencing ICT Adoption

Factors	Enabling Features	Constraining Features
Policy framework and	Swaziland has a draft national	

implementation	ICT policy that incorporates the education sector.	
Advocacy leadership	A dedicated task team has been established to drive the consultation and adoption of the national ICT policy.	
Gender equity		No explicit mention is made of gender equality and women's empowerment with reference to ICTs in Swaziland.
Infrastructure and access		The lack of national infrastructure seriously constrains the use of ICTs in Swaziland's education institutions.
Collaborating mechanisms	The national ICT task team is specifically tasked to engage with many stakeholders to foster collaboration.	
Human resource capacity		There remains a very limited layer of skilled personnel and champions within government to drive the national policy adoption and implementation.
Fiscal resources		There is no government commitment to spend from national budget and limited financial support for civil society organisations like CET.
Learning content		Local contextually relevant learning content is currently lacking.
Attitudes	Some champions in government and civil society are very positive about continuing to promote ICT access in Swaziland and for ICTs to be used to support education.	

Notes

1 The World Factbook 2007. https://www.cia.gov/cia/publications/factbook/geos/wz.html
2 Jones, M, "Swazi 'Aids cure' scam uncovered. BBC Newsnight, 1 December 2006.
http://news.bbc.co.uk/1/hi/world/africa/6197222.stm

3 Statistics in the Human Development Report. http://hdr.undp.org/hdr2006/statistics/
4 Ministry of Education. http://www.gov.sz/home.asp?pid=745
5 "Critical Issues for Children." Humanitarian Action Report 2007. UNICEF ESARO.
http://www.unicef.org/har07/index_37538.htm
6 Sibiya, T, "Swaziland's Internet Market: Small But with Enormous Potential." 2005.
http://www.balancingact-africa.com/news/back/balancing-act_114.html#top

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