ICT in Education in Morocco

by Amr Hamdy
June 2007

Source*: World Fact Book[1] 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.

The findings, interpretations and conclusions expressed herein are entirely those of the author(s) and do not necessarily reflect the view of *info*Dev, the Donors of *info*Dev, the World Bank and its affiliated organizations, the Board of Executive Directors of the World Bank or the governments they represent. The World Bank cannot guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply on the part of the World Bank any judgment of the legal status of any territory or the endorsement or acceptance of such boundaries.

It is expected that individual *Country Reports* from the *Survey of ICT and Education in Africa* will be updated in an iterative process over time based on additional research and feedback received through the *info*Dev web site. For more information, and to suggest modifications to individual *Country Reports*, please see www.infodev.org/ict4edu-Africa.

Overview

The Moroccan government has realised the key role played by ICT-based education as a positive contributor to the Information Society. Article 10 of the National Charter of Education and Training of 1999 is focused on the integration of ICT in education and supports the acquisition of computing facilities at schools along with the promotion of distance education and learning. Several programmes and initiatives, led and supported by the government, are taking place in the context of a long-term strategy that is intended to cover all education sectors and regions to ensure equal opportunity for all citizens.

Country Profile

The Kingdom of Morocco is situated in North Africa, with a long coast on the Atlantic Ocean that reaches past the Strait of Gibraltar into the Mediterranean Sea. Its climate, geography, and history are all more closely related to the Mediterranean than to the rest of Africa, and for this reason visitors are often struck by the odd sensation of having not quite reached Africa in Morocco.

Morocco, a constitutional monarchy, is the only African country that is not currently a member of the African Union. However, it is a member of the Arab League, Arab Maghreb Union, Organization of the Islamic Conference, Mediterranean Dialogue group, and Group of 77, and it is a major non-NATO ally.

Table 1 provides some selected socio-economic indicators for the country.[2]

Table 1: Socio-economic Indicators: Morocco

Indicator	
Nationality	Moroccan
Ethnic groups	Arab-Berber 99.1%; other 0.7%; Jewish 0.2%
Religions	Muslim 98.7%; Christian 1.1%; Jewish 0.2%
Languages	Arabic (official); Berber dialects; French often the language of business, government, and diplomacy
Population	33.2 million (July 2006 est.)
Population growth rate	1.55% (2006 est.)
Literacy	Male: 64.1% Female: 39.4% Total population: 51.7% (2003 est.)
GDP (US dollars)	$56.72 billion (2006 est.)
GDP per capita (US dollars)	$4,400 (2006 est.)
Labour force	11.25 million (2006 est.)
Unemployment rate	7.7% (2006 est.)
Telephones: main lines in use	1.341 million (2005)
Telephones: mobile cellular	12.393 million (2005)
Radio broadcast	AM 27; FM 25; shortwave 6 (1998)

stations	
Television broadcast stations	35 (plus 66 repeaters) (1995)
Internet users	4.6 million (2005)

The Education System

Since its independence from French colonisation in 1956, Morocco has laid the foundation for the modernisation of the education system with the main goal of "Arabising" the curriculum and faculty as well as increasing access to education. It has made significant strides in education over the past decades. The French model was adopted and Morocco implemented three tracks of education:

- Modern, which is basically the continuation of the French system
- Original, which is basically Koranic
- Technical, to graduate skilled workers

The education system has undergone several reforms in an effort to reduce regional differences in quality and standards and to ensure general access to education throughout the country. In 1963, education became compulsory for Moroccan children between the ages of six through 13.

Education is free in public schools and is organised as follows:

- Basic (or fundamental) education is divided into two cycles of six and three years respectively. The first six-year cycle is taught at primary schools. The second stage of basic education is generally taught at colleges. Based on the grades achieved in the first nine years, students are enrolled at the secondary level to follow general, technical, or professional studies.
- Vocational studies are accessed by students who finish six years of basic education and pass an entrance exam. They attend a two-year course that leads to the Certificate of Professional Training. The students who complete nine years of basic education may join a two-year programme leading to a Diploma of Professional Qualification in an area of specialisation. Those who finish basic and secondary education but do not pass the baccalaureate exam can take a two-year programme that leads to the Diploma of Technician.

ICT Policies

One of the important axes of the educational reform is the integration of ICT into teaching. This reform was implemented by the National Charter of Education and Training of 1999. Article 10 of the Charter is focused on the integration of ICT in education and supporting the acquisition of computing facilities at schools with the promotion of distance education and learning. With the highest political support as well as the collaboration of selected business leaders and representatives of civil society, a national action plan was formulated in December 1998 and finalised in May 1999.

The King announced the period 1999-2009 as the "education decade." The government focused on five key themes that are important for facilitating the role of knowledge in development and for the effective use of ICTs: education, governance, private sector development, e-commerce, and access. These themes formed the basis for the national strategy for ICT development and together were called the e-Maroc plan.[3]

As a result of the enabling policy of the government to spread the use of ICT in all aspects of life in Morocco, a liberalisation and privatisation policy in the telecommunications sector led to the reduction of telecommunications cost and resulted in a rise in the number of cyber cafés and access to computers and Internet, even in small towns. Currently it is estimated that there are 4.6 million Internet users, which represents a 15.2% penetration rate in the population and a 4.5% growth rate since 2000.[4]

Infrastructure

Today with a population of 33 million, of which over 50% are under the age of 24, Morocco has more than 2,200 Internet service providers (ISPs) and cyber cafés and a reasonable communications infrastructure.

The Ministère de l'Education Nationale and the Ministère de l'Enseignement Supérieur, de la Recherche Scientifique et de la Formation des Cadres were involved in networking the academic institutions. A total of 14 universities and higher education institutions have been connected to the Internet via an X.25 gateway operated by Morocco Trade and Development Services in Rabat with support from USAID.[5]

Tables 2, 3, and 4 provide a snapshot of the state of national ICT infrastructure in the education system.

Table 2: ICT as of January 2005[6]

Indicator	Primary Schools	Middle Schools	High Schools	Training Centres
Number of institutions	6,788 schools 13,049 satellite schools	1,206	615	56
Computer-equipped	4.5% (320 schools)	70% (960 schools)	100%	100%
Internet connection	4.5% (320 schools)	20% (240 schools)	80% (500 schools)	100%
Trained personnel	1% (1,500 teachers)	13.5% (7,200 teachers)	9% (3,200 teachers)	100%

Table 3: Timetable for Equipping Schools[7]

	2004	2005	2006	2007	Total
High school	3,000	4,000	4,000	4,000	15,000
Middle school	4,000	8,000	8,000	8,000	28,000
Primary school		30,000	30,000	30,000	90,000
Total	7,000	42,000	42,000	42,000	133,000

Table 4: Timetable for Teacher Training[8]

Level of instruction	Total number of teachers	Training year				
		2004	2005	2006	2007	Total
High school	35,000	10,000	9,000	8,000	7,000	34,000
Middle school	55,202	15,000	14,000	11,000	7,000	47,000
Primary school	135,663	5,000	7,000	11,000	30,000	39,000
	225,865	30,000	30,000	30,000	30,000	120,000

Current ICT Initiatives and Projects

Table 5 summarises the current and recent ICT initiatives and projects in Morocco.

Table 5: ICT Initiatives and Projects

Programme	Description
GENIE	In March 2005, the Moroccan government adopted a strategy having as its main objective the generalisation of ICT in all public schools with the aim of improving the quality of teaching. This three-year programme will cost about $11 million and aims at providing schools (over 8,600 schools and high schools) with Internet-connected multimedia rooms by 2008. Infrastructure, teacher training, and the development of pedagogical content are part of this national programme which the King officially launched on September 15, 2005. USAID supports this programme through the Last Mile Initiative, which provides multimedia centres in rural middle schools and teacher training in four regions of the country. The GENIE project is built around three complementary axes: • **ICT equipment**: GENIE plans to equip all Moroccan schools with computer labs with ADSL Internet access. It is estimated that 104,000 computers over three years (2005-2008), plus additional equipments like printers and scanners, will be provided. The management of GENIE is placed on a steering committee chaired by the prime minister. A project team was created to follow the implementation of GENIE programme.

	• **Teachers' and school administrators' training**: The training axis in the GENIE project is carried out in close collaboration with several international partners. To implement the training components, regional computer labs have been set up in the 16 regional academies affiliated to the Ministry of Education. The components include: o Training in basic use of computers for 230,000 teachers and school administrators o Training in the use of ICT as a pedagogical tool to more than 18,000 teachers o Training in maintenance to more than 700 technicians o Special training in school management **Curriculum development**: The curriculum development axis includes installing a national laboratory for the development of educational content and installing a national educational portal. The portal will offer several services such as educational resources, discussion forums, e-mail addresses to all teachers, a virtual library, and educational search engines.
Marwan Project	Morocco Wide Area Network was launched in 1997 and activated in 2002. Its main objective is to ensure low-cost access to the Internet for Moroccan universities, to establish a network hosted within universities and administrated by dedicated staff, and to provide a scalable architecture and large bandwidth.
Higher Education Programmes	
CVM	The Moroccan Virtual Campus which was launched in 2002. Its mission is to build and promote synergies between the various e-learning projects within Moroccan universities, enable students to choose their study location and time, enforce the educational content quality, offer scalability to teaching and learning (individualised programmes), facilitate knowledge access, and raise the degree of responsibility of students.
CATT	Computer Assisted Teacher Training was implemented in 1999 with the support of the USAID, with the objectives of equipping CFIs, creating networks of seven CFIs, training 70 instructors and 490 teachers, and developing a community Web site. (www.ibtekar.edu.mc)
Collaborative Learning Programmes	
CIVICS	Community Voices Collaborative Solutions is a project for English-language educators from Algeria, Egypt, India, Jordan, Lebanon, Morocco, Pakistan, Sri Lanka, and Tunisia who are participating in iEARN projects that focus on issues of civic education. The iEARN CIVICS project: • Provides a model for civic education and content-based English as a second/foreign language using iEARN professional development resources and methodologies • Integrates educators in the Near East, North Africa and South Asia into iEARN projects • Creates safe and nurturing environments for students and educators in these regions to address civic education issues relevant to their communities[9]
BRIDGE	The goals of the BRIDGE (Building Respect through Internet

	Dialogue and Global Education) project are to: • Generate dynamic and meaningful dialogue between educators and students in the US and countries with large Muslim populations that lead to long-term personal and institutional ties and continuing face-to-face exchanges to promote mutual understanding • Enhance the use of the Internet in schools in developing educational materials and methodologies that will benefit schools in teaching language, geography, social studies, and culture. • Develop tools and a climate for discussing differing points of view, overcoming suspicion and avoiding and resolving conflict; to promote greater awareness from parents and community members about the benefits of Internet-based collaboration and face-to-face exchanges of educators and students • Generate tangible products as an outcome of the collaborative projects. (www.thebridgeproject.org*)*
ALEF	ALEF (Advancing Learning and Employability for a Better Future) is an educational project funded by the USAID American Agency for International Development. ALEF is a three-year project managed by a consortium of organisations and lead by the Academy for Educational Development (AED). (www.alef.ma)
MAF	MAF (Mtandao Afrika) is a collaborative programme for young people to form teams and develop educational Web sites. It is implemented in collaboration with SchoolNet Africa and AGENT Consulting.

Implementing ICT in Education: What Helps and What Hinders?

There are no major constraints facing Morocco, but the government is seeking innovative solutions and private-public partnerships to put in place the pilot projects in the different priority themes. The government has to combine the efforts of all development shareholders to promote the active use of knowledge for development and to take advantage of ICTs to facilitate information sharing, communication, new applications of technology, and to foster democracy and moralisation of public life using ICT as the major tool.

Notes

1 The World Factbook 2007. https://www.cia.gov/cia/publications/factbook/geos/mo.html
2 Ibid.
[3] Mots du Ministre Missions Textes Juridiques An2000 Plan Quinquennal Projets Manifestations Contacts Liens Forum home- Plan Quinquennal 1999-2003. United Nations Economic Commission for Africa (UNECA).
http://www.uneca.org/aisi/nici/Documents/Maroc%20NICI%20Country%20Plan.doc
4 Algeria Internet Usage and Marketing Report. Internet World Stats.
http://www.internetworldstats.com/af/dz.htm
5 Morocco News. USAID. 2005. www.usaid.gov/ma/news/sept05.html
6 Technologies for Education for All: Possibilities and Prospects in the Arab World. Hamid Behaj.

January 2005. http://www.uneca.org/aisi/NICI/country_profiles/Morocco/morocinfra.htm
7 Moroccan Education and Resource Network. www.mearn.org
8 Country profile: Morocco. UNECA.
http://www.uneca.org/aisi/NICI/country_profiles/Morocco/morocinfra.htm
9 Community Voices Collaborative Solutions (CIVICS). http://www.iearn.org/civics/

Given the constantly changing nature of the Internet, we suggest that you copy the document or web site title (and author or organization name, as appropriate) of a resource below into your favorite search engine if a link on this page is not working.