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ICT in Education in Libya

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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

Libya boasts the highest literacy rate in the Arab world, and the UN's Human Development Index, which ranks standard of living, social security, health care and other factors for development, places Libya at the top of all African countries. Government reform plans in developing ICT infrastructure in Libya and incorporating ICT in education as key components in its overall development plans. Libya has intentions to be seen taking a leadership role on the African continent through sponsorship of major initiatives and projects, including those in the neighboring countries of Chad, Niger, and Rwanda. That said, the challenges of poor existing infrastructure and a lack of skilled and ICT-equipped teachers is a great challenge to the current reform process.

Country Profile

Libya, one of the largest countries by area in Africa, is situated in North Africa, with long borders on the Mediterranean Sea where the majority of the population lives. The vast portion of the country covered by the Sahara Desert is hardly inhabited.

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

Table 1: Socio-economic Indicators: Libya

Indicator	
Religions	Sunni Muslim 97%; other 3%
Languages	Arabic, Italian, English. All are widely understood in the major cities.
Population	5.9 million (includes 166,510 non-nationals) (2006 est.)
Population growth rate	2.3% (2006 est.)
Literacy	Male: 92.4% Female: 72% Total population: 82.6% (2003 est.)
GDP (US dollars)	$34.83 billion (2006 est.)
GDP per capita (US dollars)	$12,700 (2006 est.)
Labour force	1.787 million (2006 est.)

The Education System

Education in Libya is free to everyone from elementary school right up to university and post-graduate study, at home or abroad. Schools are positioned throughout the country. The policy is to reach out even to the nomadic hard-to-reach areas, and mobile classrooms were introduced to cover all of Libya.

Libya's population of approximately 5.9 million includes 1.7 million students, over 270,000 of whom study at the tertiary level, including those in the higher-technical and vocational sector.[3] This number is an increase of over 200,000 from the level of 1975, when just over 13,000 were enrolled.

Pre-university schooling is divided into three sections: primary, preparatory, and secondary.

The first nine years of education are compulsory and are known as basic education, which consists of six years of primary school and the first three years of secondary school. Primary education covers six years divided into a four-year period and a two-year period, and secondary education covers six to seven years divided into a three-year cycle (compulsory) and a three- to four-year intermediate cycle.

The basic level allows students who drop out before completing the full nine years of the opportunity to enroll in vocational programmes of one to three years in length. Intermediate vocational training centres train students for various skills-based professions. Vocational schools offer programmes for 44 different vocations in seven major fields.

Higher education in Libya is provided by universities (both general and specialised) and higher technical and vocational institutions. The higher education system is financed by, and under the authority of, the state. The Open University is the only institution within the public sector that relies to some extent on tuition fees paid by students. Policymakers have in recent years allowed the establishment of private institutions of higher education through what are known as educational co-operatives (Tasharukiat Talimia). There has also been considerable research into the possibility of developing partnerships between the public (shabiat) and private sectors to finance higher education, which, in a three-year period between 1997 and 2000, resulted in the establishment of more than five private university colleges and higher education institutes.

Education is free up to university level. Post-graduate studies are not free but are subsidised. For example, the whole cost of a master's degree course at the Academy of Postgraduate Studies may cost around 3,000 Libyan dinars or about USD$2,300 for three years.

Table 2 provides a quantitative perspective of some selected system indicators.[4]

Table 2: Selected Education Data

Indicator	Total
Public schools	4,000
Private schools	255
Technical	1,066
International	15
Kindergartens and nurseries for pre-school children	1,250

Elementary students	838,395
Preparatory students	273,391
Secondary students	120,000
Specialist secondary schools	280,000
Public universities	27
Private universities	56
Private institutes	255
Technical	50 (approx.)
International	10 (approx.)
University students	246,000

ICT Policies

The national policy for ICT in education was launched in 2005 and is mainly managed by the Ministry of Education and the Ministry of Vocational Training with the participation and support of other parties such as the General Postal and Telecommunication Company and Libya Telecom and Technology. The policy in general aims at enabling access to the ICT through the provision of computers and the Internet. This is planned for the short term and there are some signs that the policy is being followed up and implemented.

The door has been opened for public-private partnerships especially since the embargos against Libya have ended. There is a huge scope for co-operation between the government and the private sector, as Libya is still new to technology in terms of its ability to run large-scale ICT programmes. The government is determined to provide tools and ICT skills on a large scale to all sectors of the country. The UNDP is playing a vital role in laying the groundwork for the ICT policy implementation.

The policy is in its early stages. However the main aim is to improve the quality of education through ICT by:

- Adopting modern techniques and methods in education
- Encouraging the scientific community to engage in research within the community
- Encouraging the private sector to get involved in funding higher and specialist education
- Developing open and distance learning as well as continued education
- Encouraging higher education

Each ministry is in charge of its designated sector of education (i.e., general education, higher education, and vocational education with training). The highest authority they all report to is the General People's Committee. The ministries also co-operate with each other in matters that are linked to one another.

Infrastructure

Libya has moved from having virtually no lines after its revolution in the early 1960s, to having one in every 10 of its four million inhabitants now having telephone access. The telephone system is 90% digital and is expected to be fully digitised by the end of the year. In Tobruq, Naidoo opened a new digital telephone exchange, watched by many hundreds of local citizens. A Siemens digital switch will add a further 8,000 lines to the country's rapidly growing telecommunications infrastructure.

The telecommunications operator is the General Posts and Telecommunications Company (GTPC) and there is also a cellular service based on the GSM standard, which is managed by Ericcson and Orbit Telecom for GPTC.

The Centre National de l'Information et de la Documentation is the main networking agency in the country. The Post and Telecom operates an Internet hub in Tripoli with a 2MB International link via Teleglobe in Canada. Dial-up and leased-line facilities are available via Libya Telecom and Technology.

Table 3 provides a snapshot of the state of national ICT infrastructure in the country. Table 4 summarises the computer penetration.

Table 3: ICT in Libya[5]

Indicator	
Telephones - main lines in use	750,000 (2003)
Telephones - mobile cellular	234,800 (2004)
Radio broadcast stations	AM 16; FM 3; shortwave 3 (2002)
Television broadcast stations	12 (plus 1 repeater) (1999)
Internet users	205,000 (2005)
Cities with internet POPs	1
Internet hosts	2
Internet access providers	1

Table 4: Computer Penetration in Libya

Indicator	
Home computers	3.16%
Primary schools	5%
Secondary schools	50%
Universities	100%

Current ICT Initiatives and Projects

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

Table 5: ICT Initiatives and Projects

Programme	Description
Capacity-building Projects	
Capacity-building, post-graduate studies	In late 2006, 200 post-graduate students were sent to the UK to do an intensive one-year course in modern management techniques and management within the education system in Libya. *Partners/donors:* Ministry of Vocational Training
Capacity-building and teacher training	There is a programme for the training of teachers and staff on ICT and ICT for education which is a governmental initiative. *Partners/donors:* The Libyan General Company for Postal Services and Telecommunications owns and operates Libyan Telecom and Technology (LTT) which offers Internet access
National ICT project for capacity-building	The project activities will include the establishment of Local Area Networks (LANs) within all 149 faculties belonging to various university campuses and institutes, and of a Wide Area Network (WAN) forming the Libyan Higher Education and Research Network (LHERN). It also foresees the creation of digital libraries/portals of educational resources, the development of ICT-enhanced learning solutions (e.g., e-learning, tele-education, tele-medicine). An important component of the project is the training of faculty (digital literacy, basic ICT skills, advanced teacher training on using ICTs in teaching and courseware development) and staff (system administrators, media centre specialists, etc.). In addition, the project foresees the creation of a national ICT resource centre for educators and the automation of university management systems through ICTs (e.g., student information systems, university procedures, financial operations, etc.). *Partners/donors:* UNESCO and the government[6]
Infrastructure Projects	
The National Initiative for the Introduction of Computers	This initiative aims at importing and installing 3,400 computer laboratories at all elementary and primary schools at the estimated cost of 121 million Libyan dinars (about USD$95 million). This is an effort of the General People's Committee (Ministry of Education) to develop and modernise the educational system in Libya. *Partners/donors:* General People's Committee (Ministry of Education)
Model schools	About 400 model schools nationwide are going to be set up to offer modern and up-to-date courses as well as being equipped with the latest technologies and learning facilities.
Development of inexpensive educational laptop support	One Laptop Per Child (OLPC), a non-profit US group, has the goal of supplying machines to all 1.2 million Libyan school children by June 2008. Libya will receive 1.2 million computers, one server per school, and a team of technical advisors to help set up the system, satellite Internet service, and other infrastructure. The country will invest USD$250 million in the project. *Partners/donors:* The government and OLPC[7]
e-Learning Projects	
The Open University	The Open University was introduced in 1990 and offers distance education courses. Its main centre is in Tripoli, with 16 other branches located around the country. Curricula and teaching

	programmes are conveyed via written and audiovisual learning packages.

Implementing ICT in Education: What Helps and What Hinders?

Table 6 provides a summary of the current stage of ICT development in Libya in terms of enabling or constraining features in the education system.

Table 6: Factors Influencing ICT Adoption

Factors	Enabling Features	Constraining Features
Policy framework and implementation plan	A national ICT policy for education was launched in 2005. The policy aims at providing access to ICT tools and building a strong infrastructure. The policy also encourages research and development.	The implementation of the ICT policy is still at the early stages, as is access to ICT tools. Collaboration of all government entities, the private sector, and the donor community is required to achieve the set policy and ensure proper implementation and provision of access for all.
Advocacy and leadership	The leadership in the Jamahiriya headed by Col. Qaddafi is determined to build a strong society capable of competing in the global arena. Implementation of the national ICT policy in education is directly monitored by the Ministry of Education and Ministry of Vocational training.	Libya has faced a number of constraints and challenges especially during the embargo (which ended in 2006).
Collaborating mechanism	Different government agencies and the local and foreign private sector are collaborating to achieve socio-economic development through the implementation of the national ICT policy. UNDP and UNESCO work hand in hand with government agencies to ensure proper and timely implementation of the ICT strategy. This support also opens the door for the donor community and encourages investment in Libya.	Libya still lags behind in terms of usage of ICT tools, infrastructure and access. The process of implementing the national ICT policy in particular and development projects in different domains in general are still at an early stage.
Human resources	One of the main objectives of the national ICT policy for education	There is a lack of well-qualified and trained teachers, required for

	is human resource development. Investment in human resources is key to achieving the goals and objectives of the national ICT strategy.	building a generation of technically qualified students. In addition, there is a great deal of apathy among teachers due to their low salaries.
Rural/urban divide	The target is to provide education to all children and provide outreach to all areas of Libya. To overcome the constraint of the extended areas in the Sahara, mobile schools were introduced to provide access to education for nomadic, hard-to-reach parts of the country.	
Gender equality	A statement by Col. Qaddafi demonstrates the commitment to provide services, especially in the area of capacity-building and education, with no differentiation between genders. In fact, currently there are more females than males in the schools, and they record higher performances levels.	
Learning material	An objective of the national policy in education is research and development to ensure the provision of proper learning materials and tools. Provision of new methods and media for learning is also of concern.	Educational materials are available free up to secondary schooling, but the quality of learning material and curricula needs revamping to meet with latest technological developments and to set the grounds for building a generation capable of being active contributors to the development of Libya.
Sustainability	The lifting of the embargos has set the stage for stable sustainable development in Libya. The government remains focused on achieving growth at all levels. The national ICT policy is administered and supervised by relevant government officials with support and guidance of different UN agencies.	

Notes

1 The World Factbook 2007. https://www.cia.gov/cia/publications/factbook/geos/ly.html
2 Ibid.
3 Clark, N. Education in Libya. 2004. World Education Services (WES).
http://www.wes.org/ewenr/PF/04Jul/PFPractical.htm
4 Libya Education.Encyclopedia of the Nations. http://www.nationsencyclopedia.com/Africa/Libya-EDUCATION.html
5 The World Factbook 2007. https://www.cia.gov/cia/publications/factbook/geos/ly.html
6 Multimedia Community Centres. UNESCO. http://portal.unesco.org/ci/en/ev.php URL_ID=20789&URL_DO=DO_TOPIC&URL_SECTION=201.html
7 Qaddafi's Computer Kids. http://www.checkpoint-elearning.com/article/3334.html

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