ICT in Education in the Central African Republic

by Babacar Fall
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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

The Central African Republic (CAR) faces many challenges to make a greater effort in training, budgeting, and awareness creation concerning the use of ICTs. Introducing ICTs into basic education (especially in secondary education) is increasingly seen by many as a necessity, and the development of teacher skills is necessary to enhance the use of educational technology.

The country has only one university and enrolment rates are low for most levels of education. To reverse this situation, the government has made some worthy efforts to promote basic education, such as the building of new schools in the capital and the provinces with assistance from the European Union and the World Bank.

Country Profile

Occupying a surface area of 623,000 square kilometres, CAR is a landlocked country bordered by Chad on the north, the Democratic Republic of Congo and the Congo on the south, Cameroon on the west, and Sudan on the east. Its highest point is Mount Ngaoui, at 1,420 metres. The official and economic capital is Bangui, which has a population of 600,000.

The country's climate is mostly tropical, with a wet season from May to October and a dry season from November to April. The climate varies from region to region, with an equatorial climate in the south, inter-tropical from Carnot to Berbérati in the west, and desert towards Birao in the north. The dry season lasts eight to nine months, and there is a cool and stormy season on the highlands.

The country is divided into 16 prefectures and 67 sub-prefectures. A predominantly agricultural country, CAR exports timber, coffee, and diamonds. Its mineral resources include uranium, iron, and oil, but these are not exploited yet.

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

Table 1: Socio-economic Indicators: Central Republic of Africa

Indicator	
Area	623,000 km²
Population	3.5 million
Demographic growth rate	1.7 %
Population density	5.7 people/km²
GNP (US dollars)	$0.97 billion
GNP per capita (US dollars)	$270
GNP real growth rate	+3.3 %

The Education System

Law 97.014, enacted December 10, 1997, concerning education is the essential element of stopping the drift in the education system. It emphasises that education is a national priority and that every citizen is entitled to education and knowledge.

The National Education Development Plan (PNDE) sets the general strategy for reaching the objectives of quality, efficiency, accessibility, and equity in education for the next 10 years. Some strategies in the education section of the National Plan for the Fight Against Poverty (PNLCP) are akin to those of PNDE.[3]

In 2003:

- The total illiteracy rate was 57.3% (46.2% men, 68.0% women, and 70.9% in rural zones)
- The total schooling rate in the Fundamental 1was 68.7% (58.7% were women and 46% in rural zones)
- The net schooling rate in Fundamental 1 was 40.7% (44.3% men, 36.9% women, and 26.7% in rural zones)

The change in the net schooling rate in the Fundamental 1 indicates a decline in the rate from year to year:

- 1988: 47.8%
- 2000: 42.9%
- 2003: 40.7%

The total schooling rate in the Fundamental II (junior high school) was 10.8% (12.6% men and 9.0 % women).

There is only one university, and the enrolment is low. The relative proportion of students in the total population is just as low. To reverse this situation, the government has promoted basic education, especially for primary and secondary institutions. In the past few years, the state has built new establishments in the capital as well as in the provinces, thanks to funding from the European Union and the World Bank.

ICT Policies

The elaboration of a national strategy began in January 2002. The government decreed a process to set up the National Plan for Information and Communication Infrastructure (NICI). Some consultation workshops were organised for members of the government, university staffs, the private sector, managers, and authorities in telecommunication regulation. Subsequently, an initial study was carried out in June and July 2002. The current government proposed organising a national workshop to validate and activate the NICI plan and to reach a consensus.[4]

The national policy aims to:

- Promote public participation through dialogue
- Support initiatives of basic communities through information, knowledge, and technical skill exchanges
- Broadcast information and introduce new innovations through availability of social communication instruments
- Promote systems of popularisation, supervision, training, and horizontal communication

The Director of the Development of Technology, a branch of the Ministry of Telecommunications and Technology, created in 1999, is responsible for this policy.

Infrastructure

Table 2 provides a snapshot of the state of national ICT infrastructure in the country.[5]

Table 2: ICT in Central African Republic

Indicator	
Literacy rate	49.6
Televisions per 1,000 people	6
Radios per 1,000 people	80
Fixed telephone lines per 1,000 people	2
Cell phones per 1,000 people	3
Personal computers per 1,000 people	1.9
Internet users (thousands)	2
Total number of main lines	12,000 (10,000 in Bangui, 2,000 in the provinces)
Number of mobile phone subscribers	60,000
Telephone density	0.34 (phone lines/100 people)
Main lines growth rate	8%

Given the underdevelopment of the basic network, access to ICT is for now only possible in the capital, where there are around 1,800 Internet subscribers out of a population of 600,000. Twenty private cyber cafés and two education centres offer Internet access on work days. The insufficiency of the basic network is not due to a lack of political will but to the restricted financial resources.

Notably, the advent of ICTs in the country was delayed due to the low telephone density of the network.

ICT in Education

In Africa, the education sector is the first to benefit from the valuable uses of the Internet. Multimedia-supported instruction, distance education, and distance access to scientific information all constitute significant assets for those seeking to further their knowledge.

Still, there is a great need for resources to support and equip schools with computer technology, be it for management or teaching purposes. Several initiatives are in place to address this need, detailed below.

Current ICT Initiatives and Projects

Some pilot projects have been set up to equip urban zones with digital community centres. Three of these projects are in progress and three other centres are expected to be built next year thanks to outside funding.

- As part of its mission in Central African Republic, the United Nations Program for Development (PNUD) has developed an ICT plan that concentrates on the social and economic objectives of the Millennium Declaration and has a primary objective of enabling universal access to the information society. Its more specific focus is on policies related to education, health, employment, government efficiency, development of local content, and the social integration and the promotion of science, technology, and innovation. It is adapted to the country's national characteristics, needs, and values and emphasises the state's central role in the formulation and implementation of a policy tied to ICT, in partnership with international organisations, the private sector, and civil society. Its goals are to:

    - Use new and existing technologies to create universal connectivity by distributing information and communication materials so that everyone can benefit from easy access, including the elderly and handicapped
    - Develop connectivity, including Internet access, in institutions receiving many people such as digital community centres, schools, universities, libraries, post offices, community and cultural centres, archives, and museums
    - Find appropriate solutions for promoting ICTs adapted to the environment in remote, impoverished, and particularly rural zones, but also in poorly serviced or marginalised urban zones (e.g., by establishing multipurpose community access centres to guarantee integrated access to information and social services)
    - Find solutions to make access to ICT affordable in regions with low revenues
    - Supply information and applications in the language and cultural context that is most familiar to the user, which will encourage further ICT use
    - Include unwritten languages by using audio-digital tools

- The close collaboration between PNUD, the Central African Government, and CISCO Systems has resulted in the creation of the local CISCO Academy of Bangui at the University of Bangui. This institution offers advanced training in conceiving, installing, and maintaining computer networks. This centre has already trained national technicians.
- The ADEN project, led by the French Cooperation for Democratising ICT Access, has created a number of centres where students can access computers and the Internet and receive tutorials from teachers. Teachers use the centres to search for information and to develop teaching materials. This has been so successful that the government has approved and authorised total exemption from import tariffs on equipment for ADEN centres all over the country.
- The Virtual Francophone Campus offers Trainings in ICT
- The Department of Higher Education, with aid from the French Cooperation, initiated a programme that aims to set up a network of all university institutions. This programme has enabled the creation of a multimedia resource centre (CRM) and the CISCO Academy with the support of PNUD/UIT. The CRM has already offered a training programme to attain a post-bachelor's professional degree. Twelve students

are trained every year in ICT vocations. In the future, the CRM aims to deal with tele-education and produce multimedia in CD-Rom format. A virtual campus will soon be installed by the Francophone Agency. Students are asked, at the end of their training, to carry out Web site creation projects (University, Pasteur Institute of Bangui).[6]

- The project supporting the fight against digital gap (ADEN) has been set up in 11 French, English, and Portuguese sub-Saharan African-speaking countries from by the International Cooperation of the French Ministry of Foreign Affairs. Its goals are to democratise Internet access, train people in the use of new technology, and encourage the African production of content. It responds to the question of how to reduce the digital gap in Africa by setting up a thorough plan for creating public Internet access centres in digitally isolated zones.[7] The main ADEN centres are Bambari "Ouaka," Bangassou, Berberati, Bouar, and Mbaiki "Wambangana."
- The International Telecommunications Union launched a project aiming to create a network of at least 100 multipurpose community call boxes (TCPs) in 20 African countries, including the Central African Republic. These TCPs will give communities access to ICT to enable them to participate in the information society. The TCPs will be managed by women, who can thus actively participate in the processes of development and decision-making on the African continent. This project is part of the commitment made by 175 countries that adopted an action plan during the first phase of the Information Society World Summit, aiming to make the advantages of ICT within humanity's reach.[8]

Implementing ICT in Education: What Helps and What Hinders?

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

Table 3: Factors Influencing ICT Adoption

Factors	Enabling Features	Constraining Features
Policy framework and implementation	The government decreed a process to set up the National Plan for Information and Communication Infrastructure (NICI).	A military-political crisis that took place March 15, 2003, severely affected the already-inadequate telecommunication infrastructures, and therefore the development of ICT.
Gender equity		There is a digital divide between the genders.
Infrastructure and access	Access to the Web through local telecommunication providers offers the population many opportunities to remove themselves from isolation.	Equipment is costly due to a difficult fiscal system
Collaborating mechanisms	The current government has proposed organising a national workshop to validate and activate the NICI plan and to reach a consensus.	

Factors	Enabling Features	Constraining Features
Fiscal resources		There are scarce financial resources.

General References

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Notes

1 The World Factbook 2007. www.cia.gov/cia/publications/factbook/geos/gb.html
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8 L'UIT lance un projet de télécentres communautaires polyvalents en Afrique. 10 Janvier 2005. L'Union Internationale des Télécommunications (UIT). http://www.itu.int/newsarchive/press_releases/2005/02-fr.html

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