

**Using Information and Communication Technology to enhance educational goals in
developing countries: the example of the Catholic University of Angola**

L. Amaral (1), V. Cavecchia (2), V. D'Andrea (3), G. Jacucci (3), F. Nardin (4),
E. Olafsen (4), A. Veloso (1), F. Vieira-Dias (1)

- (1) UCAN, Luanda, Angola
- (2) CNR, Trento, Italy
- (3) University of Trento, Italy
- (4) AEAF, Boston, USA

Contact: F. Nardin - email: filippo@aeaf.org - Tel. +1 (617) 951-0467

Angola is slowly moving toward a peaceful future after years of devastating civil war, and one of the biggest challenges ahead is the rebuilding of the country's post-war society. Belief in a recovered and thriving Angola requires attention to long-term needs, including initiatives that will focus on higher-education programs for young adults.

One such project is the establishment of a Computer Engineering Department (CED) at the main campus of the Catholic University of Angola (UCAN) in the capital Luanda. CED will offer Information and Communication Technology (ICT) skills to students and continuing education programs to the community at large. Assisting UCAN in this effort are other institutions: the University of Trento acts as an academic advisor for the development of the CED curriculum; the Angola Educational Assistance Fund provides financial support, consulting and industry relation services to UCAN.

The goals of the project are wide-ranging and include: (1) providing young Angolans with valuable practical skills needed to succeed in the local economy; (2) building a faculty capable of effectively teaching and conducting ICT-related research; and (3) enhancing capacity in the community at large by means of training in the use of ICT.

The current state of the project is as follows: eighty undergraduate Angolan students are enrolled in the "preparatory year" ("propedeutico") of the CED; the CED curriculum of studies is defined with the first classes scheduled to start in March 2001; the teaching staff is

partly appointed; and a first round of classes has been offered to high school teachers as part of the continuing education programs.

In the proposed paper we analyze and discuss the following issues.

- Strategy and definition of the CED curriculum. One of the methodologies used was researching the needs of local companies to develop a program specifically designed to meet these requirements. For example, the curriculum allows for more than one educational path, in order to provide training for the diverse skill levels needed by the industry.
- Methodology to form a teaching staff at the CED. The current faculty has two staff members, and applications are currently being accepted to fill more positions. We are also involving external teachers, e.g. from the private sector. This is an opportunity for strengthening the relationship with local industries in a mutually beneficial way.
- Development of a leadership role in capacity building within Angolan society. We are devising a plan to offer internship programs to CED students at local companies. We also plan to extend the availability of ICT training programs intended to serve the community (i.e. school teachers, small businesses, local leaders, NGO's, etc) using the CED infrastructure.
- Linking the CED to the international research community. We plan to start a joint research centre with selected companies operating in Angola. Its research activities will be focused on several areas, including: applied technologies in emerging countries; digital divide; and multi-cultural working settings. The centre will offer an opportunity to engage in field research in a very unique and dynamic environment.

Related topics:

Making Learning More Accessible to Developing Countries
Lifelong Learning and its Relationship to Societal Development
Continuing Education for Sustainability
University/Industry Relationships