



United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation,
la science et la culture

Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Организация
Объединенных Наций по
вопросам образования,
науки и культуры

منظمة الأمم المتحدة
للتربية والعلم والثقافة

联合国教育、
科学及文化组织



Information Technology

UNESCO's action in the field of information technology is based on two essential goals: reducing the digital divide and building knowledge societies.

The information and digital revolution began in the United States and in a few northern European countries before spreading to the rest of the world yet it is far from over. Knowledge, the motor for productivity and economic growth, is more and more codified and transmitted through computer and information networks in the new "knowledge society". Information and communications technology (ICT) provides a package of increasingly useful tools in the creation, dissemination and sharing of knowledge. Knowing how to use a computer is now as essential to personal success as basic skills in reading, writing and arithmetic.

DIGITAL DIVIDE

Although ICT helps to build a knowledge society open to all, it is nevertheless true that a large part of the world's population does not have access to this knowledge. The growing digital divide, which constitutes a genuine knowledge gap, increases development inequalities. In this context, UNESCO has two main goals: to promote the free exchange of ideas and to help maintain, advance and disseminate knowledge. Its action is defined by the resolution of the United Nations Social and Economic Council of July 2000 on the "the role of information technology in the context of a knowledge-based global economy". It is essential to keep in mind the human element of the digital divide. The goal is to integrate all educational, social, cultural and ethical aspects to

contribute to reducing the digital divide by making human beings central to the goals pursued. ICT opens perspectives for education and training, encouraging creativity and intercultural dialogue. The Organization pursues its activities in three distinct areas: ethical, standard setting and legal; Content and ICT applications; and methodological tools and access to knowledge. UNESCO's strategy is based on four elements:

- **reaching agreement on common principals to regulate the building of knowledge societies.**

Technological progress raises ethical questions such as "open knowledge" and sharing information; the quality and reliability of information; respect for linguistic and cultural diversity; protection of intellectual property; and the balance between proprietary and free software;

- **increasing learning opportunities by giving access to content and to diverse and quality education service providers.** The Organization encourages, through pilot projects, the use of ICT in educational reform;

- **capacity building in scientific research, information sharing and cultural exchanges.** UNESCO supports the building of networks to favour greater exchanges and cooperation. The Organization will progressively create, along with other institutions, a global UNESCO portal to



Cybercentre in Manhica,
Mozambique, 2004
(S. Santimano © UNESCO)

UNESCO – Public-Private Sector Partnerships

UNESCO collaborates with numerous partners in the private and public sectors. Partnerships with information technology industries are based on ethics and high-level know-how. The list of partnerships continues to grow. It includes agreements with Hewlett Packard, Intel, Microsoft, Alcatel and Hitachi, and concerns areas as varied as teacher training programmes, community access centres or even scientific networks. The nature of the partnership varies, from traditional sponsorship to strategic agreements in which each partner plays a role but without bringing a financial contribution. The Memorandum of Understanding passed with Intel and the Cooperation Agreement passed with Microsoft mark a new stage because they are outside of the traditional context of collecting funds and sponsorship to attempt to meet the needs of developing countries.

allow access to a reservoir of information;

- **promoting ICT use with the aim of developing capacity, empowerment, and governance and social participation.** The use of ICT favours the sharing of information and democratic participation in the exercise of power by social groups at different levels.

The field of education puts ICT at the centre of its action. It allows teaching to be expanded by pushing back constraints of time and place. The challenge is to find the best use of ICT in order to improve the quality of teaching. UNESCO will establish closer links between the producers and end users of didactic materials. The goals aimed for are:

- a broad dissemination of knowledge and of best practices in the use of ICT;
- increased use by governments of ICT-based systems to provide services;
- dissemination of research results on changes brought about by ICT in the educational process and their impact;
- promotion at the international level of debate on drafting standards for content and distance learning supports and for e-learning as well as for the establishment of teaching using ICT;
- teacher training in the use of ICT as a pedagogical tool.

UNESCO and Open Source Software

Since 2001, UNESCO supports the development model of free and open source software. The rise in these types of software has led to the development of new methods of creation and of knowledge sharing. Software is called free when its source code and the basic elements of its design are accessible to all, contrary to what's called "proprietary" software in which the source code is not available. Free software is software whose programme is supplied for free to users (copyleft) with the agreement that the entire community will benefit from improvements made by each user. Copyleft guarantees that no one can individually appropriate the fruit of a collective effort.

To Find Out More

Information For All Programme (IFAP) :
<http://www.unesco.org/webworld/ifap>

Observatory on the Information Society :
<http://www.unesco.org/webworld/observatory>

Contact:

Communication and Information Sector;
Information Society Division