

Educational, Scientific and Cultural Organization

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منظمة الأمم المتحدة للتربية والغلم والثقافة

> 联合国教育、・ 科学及文化组织 .

# Internet Accessibility and the Disabled

Information and communication technology (ICT) has tremendous potential to increase the independence of people with disabilities. UNESCO advocates building inclusive knowledge societies where ICT, including the Internet, helps to improve the capacity of all people to access information and knowledge to develop their potential and improve their daily lives.

nformation and communication technology has tremendous potential to increase the independence of people with disabilities and to broaden their horizons through access to e-learning programmes, networking opportunities, e-employment, online shopping, e-health, etc. However, many people with disabilities are still denied the great promise of these technologies.

With the adoption of the UN Convention on the Rights of Persons with Disabilities

in December 2006, a legally binding instrument was born promote, protect and ensure the full and equal enjoyment of all human rights by people with disabilities. Accessibility is one of the principles of the Convention.

As of February 2009, 137 countries are signatories to Convention and introducing measures that

the involve creation and © iStock implementation of accessibility standards and programmes to make services, goods and facilities accessible to people with disabilities.

## **Universal Design**

Despite the entry into force of the Convention in May 2008, web design often does not take into account accessibility for people with disabilities. Universal Design, a relatively new paradigm, emerged from 'barrier-free' or 'accessible' design and 'assistive technology'. It provides a level of accessibility for people with disabilities by ensuring that the presentation of content on the Internet and the design of Internet

flexible technology are enough accommodate the needs of the broadest possible range of users.

Standards for accessible design are defined in the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG), whose version 2.0 was launched end 2008. W3C is also very active on the issue of compliance. A recent W3C compliance test showed 81% of web sites failed to reach minimum standards

> Special devices combined with universal design, open up the web for disabled users. Today, Braille printers, portable screen readers and video magnifiers iust some technologies available - at a price.



#### **UNESCO** and Accessibility

UNESCO is committed to ensuring the participation of all in knowledge societies and to help improve the capacity of

disabilities people with to access information and knowledge. It intervenes at the international level as a member of the multi-stakeholder Dynamic Coalition on Disability and Accessibility (DCAD), together with the International Telecommunications Union (ITU), World Wide Web Consortium, International Center for Disability Resources on the Internet (ICDRI), Literacy Bridge and Daisy Consortium, to advocate for the rights and needs of people with disabilities in debates on Internet governance.

At the local level, UNESCO encourages the development of adaptable policy

## **UN Convention on the Rights of Persons with Disabilities**

Article 2 - Definitions

"Universal design" means the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. "Universal design" shall not exclude assistive devices for particular groups of persons with disabilities where this is needed.

#### Article 9 - Accessibility

"1. To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas."

Article 21 - Freedom of expression and opinion, and access to information

"States Parties shall take all appropriate measures to ensure that persons with disabilities can exercise the right to freedom of expression and opinion, including the freedom to seek, receive and impart information and ideas on an equal basis with others and through all forms of communication of their choice."

Quote from screen reader user on the website of Royal National Institute of Blind People: "For me being online is everything. It's my hi-fi, my source of income, my supermarket, my telephone. It's my way in."

frameworks, supports the development of accessible technologies, and helps to build the capacity of disabled persons to use new technologies to broaden their horizons.

## A Photo Exhibition for the Blind

Visitors to UNESCO Headquarters in the second half of 2007 could enjoy 'Living Heritage: Exploring the Intangible', an outdoor exhibition of over a hundred photographs. At the same time, the Section for Intangible Cultural Heritage created an on-line version of the exhibition on its website — a photo exhibition that could also be enjoyed by people with visual impairments.

Text descriptions of the photographs in the virtual version of this exhibition – in English, French and Spanish – make it accessible to the visually impaired. These descriptions can be interpreted using devices such as refreshable Braille displays, screen amplifiers or speech synthesizers, creating an experience that approaches that of other visitors.

For this pilot project, UNESCO partnered with the Institut national des jeunes aveugles in Paris (INJA). Besides testing the accessibility of the virtual exhibition, students and teachers at INJA offered many suggestions on how to improve the general browsing functionality of the Intangible Cultural Heritage website.

## Accessibility and the UNESCO Portal

Accessibility has been a concern of the UNESCO web development community since

the movement towards a UNESCO portal began in 2002.

A common framework for the look and feel of the UNESCO website was developed by a cross-sectoral team of web workers in 2005. Among other accessibility checkpoints, it assured the implementation of a simple mechanism for applying styles (e.g. fonts, colours, spacing) to web pages (Cascading Style Sheets) and text versions of each page.

A new Internet User Interface for the UNESCO.ORG website is currently under development in 2009. This evolution of the current user interface promises, among other features, a higher level of accessibility for screen readers and mobile devices.

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