

Using 'Web-4-All' to address the information needs of people with disabilities

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Photo: Sudipto Das, 2005. Courtesy of Photoshare

Mentally and physically-challenged children learn to operate a computer with the aid of locally made tools and software in Kolkata, India

With the majority of the world's population being HIV-negative, the focus has rightly been put on a 'social vaccine' that is, creating sufficient levels of awareness to ensure that the epidemic does not become generalised. Such awareness, however, can only be achieved through simultaneous and sustained actions to strengthen the continuum of care, support and treatment with prevention of HIV as an integral part of the efforts.

An extremely important issue is to make information about HIV prevention, counselling and testing facilities available and accessible to all. All members of society should be seen as the 'beneficiaries' of awareness creation activities and should be given the opportunity to play a proactive role as key stakeholders in HIV prevention. The availability of useful and interactive websites can go a long way in strengthening and streamlining appropriate HIV prevention information for diverse segments of society.

Equal access to electronic information

There has been a growing recognition of the need to promote equal access to electronic information and services. Reduced access for many could become costly, both in social and economic terms, and will undermine equality and economic opportunities. With more and more information and services available on the Internet, governments are increasingly concerned that the services they provide

are equally accessible to all potential users including the disabled. Increased access to the Internet, especially by people with disabilities (PWDs), the proliferation of web-based services and the clamour for comprehensive e-government initiatives, have become critical issues in terms of Information Communications Technology (ICT) policies.

Changes in attitudes regarding PWDs

Recently, on World Telecommunication and Information Society Day, UN Secretary-General Ban Ki-moon stated: "It is vital that we change attitudes and approaches to persons with disabilities, ensuring that their fundamental rights and freedoms are honoured, including the right to fully participate in the information society." International Telecommunications Union (ITU) Secretary-General Hamadoun Touré supported this statement, saying: "The phenomenal growth of information technologies (ITs) over the past 25 years has seen the birth of a dazzling array of

new technologies to empower persons with all kinds of disabilities to take active roles in mainstream society."

HIV and AIDS as a cross-cutting issue

The problem of HIV and AIDS can be analysed from a variety of perspectives and approaches, including communications, public health, human rights, health care service delivery, economics, politics, culture and religion. It is time to generate concerted collective action to ensure an effective response through addressing the myriad issues around access to information and appropriate awareness for all segments of the society, while recognising the fact that HIV affects all spheres of life and is, therefore, everyone's responsibility.



Such gadgets can empower people with disabilities

Lessons learned

- It is imperative to use the newer technology for the betterment of humankind through improved access to information for all.
- 'Web-4-All' provides better public computer access for persons with disabilities or low literacy levels. It is the first technology of its kind capable of automatically loading individual user preferences.
- With 'Web-4-All', persons with limited dexterity or who find it difficult to work with a standard keyboard or mouse can use tools, settings and displays that are easier to manipulate.

We must all learn from good practices (I prefer that term to 'best' practices that connote that no further improvement is possible) and utilise them creatively for addressing the HIV and AIDS-related information needs of the PWDs.

The need to approach the HIV pandemic as a developmental challenge that demands a strategically-designed multi-pronged response has become an oft repeated statement, which in view of its extreme importance, nevertheless, still needs reiteration at all fora. The pandemic is a cross-cutting issue that does not respect national borders. The experiences of some of the sub-Saharan Africa nations epitomise the destructive nature of this pandemic: it has jeopardised the economies of countries and upset entire socio-economic infrastructures.

Electronic information and services for PWDs

There are many types of technologies catering to the specific needs of people who are visually-impaired, or have physical disabilities; people with dyslexia or other language and cognitive disabilities and those who are hearing-impaired. It is imperative to use the newer technology for the betterment of humankind through improved access to information for all. Use of assistive technologies like screen readers, adaptive keyboards, refreshable Braille displays, screen magnifiers, single switches, voice recognition software etc. could all be subsidised and promoted.

Below are some examples of gadgets and technologies which have helped empower persons with different disabilities:

- Frog Pad (www.frogpad.com) is a keyboard that enables a person to use a computer with just one hand. The tool is extremely useful for people with only one upper limb and comes in both left-handed and right-handed versions.
- Braille watches launched recently are immensely useful for the visually-challenged.

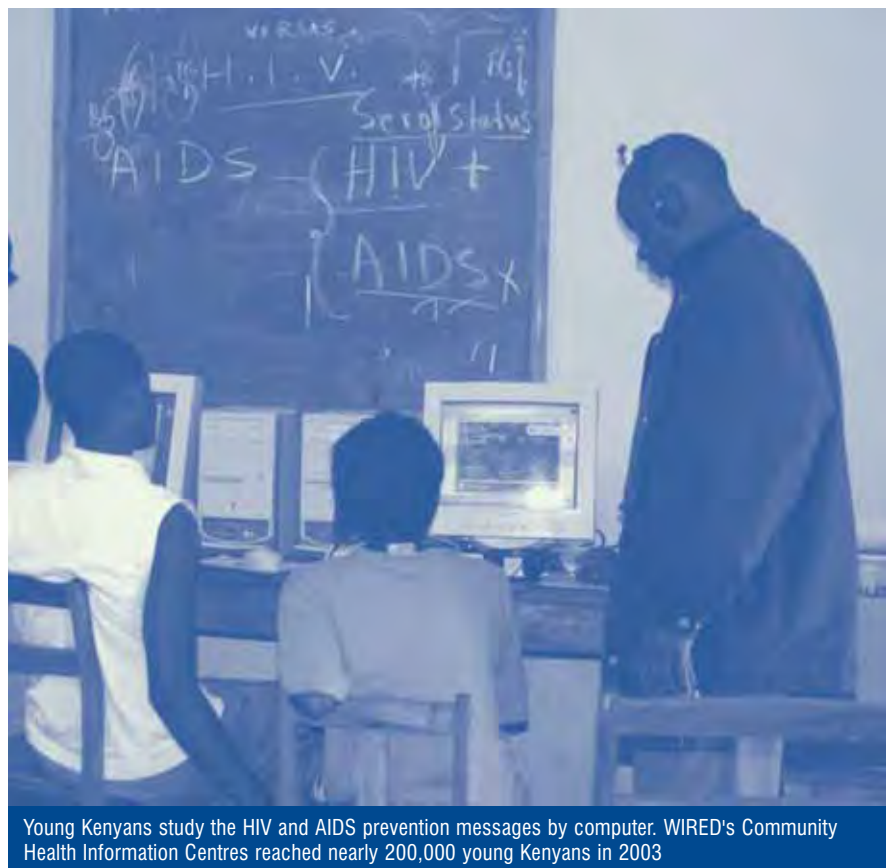
c) Tango is a device invented by Mr Richard Ellenson, father of a boy with cerebral palsy. It is made by Blink Twice and allows a person affected with cerebral palsy to learn to speak and use tactile sensations for communicating his/her feelings.

d) Audio-books are also in use and are being developed by urging people to read a book, record it and send the MP3 file to a school for the visually-challenged.

Assistive technology, whether IT or otherwise must be subsidised, popularised and promoted in the way that 'Web-4-All' has been by Industry Canada under its community access programme to attain the desired benefits. This can be achieved through concerted action by committed stakeholders.

Canada's innovative pilot programme

The Canadian Government is supporting a wide range of initiatives to promote the accessibility of Web content.



Young Kenyans study the HIV and AIDS prevention messages by computer. WIRED's Community Health Information Centres reached nearly 200,000 young Kenyans in 2003

Photo: Gary Selnow, 2003. Courtesy of Photoshare

Industry Canada's (the [department of the Government of Canada](#) with responsibility for regional economic development, investment, and innovation/[research and development](#)) Web Accessibility Office is working with other federal government departments to develop accessibility standards for the government's websites. It is also heading up an innovative pilot programme that is placing more than 1,000 assistive technology devices, called 'Web-4-All', in public Internet access sites countrywide.

'Web-4-All' was conceived in 1999 as a strategy to implement the Community Access Programme (CAP), which aimed to establish public Internet access sites. The pilot project was launched in July 2003 in Winnipeg, Manitoba. Other areas covered by the pilot project included South Shore and St John's. It provided better public computer access for persons with disabilities or low literacy levels at 13 local CAP sites. Individual 'Web-4-All' sites were selected for the following reasons: being open to the public; having a computer running Windows 2000 with a 19-inch monitor and CD-ROM; providing Internet services and providing barrier-free access to people with mobility challenges.

'Web-4-All' has been pilot-tested at public Internet access sites in selected communities across Canada. Industry Canada distributed 1,000 'Web-4-All' systems to public Internet access sites in selected communities across Canada. Both Bell Canada and the Royal Bank donated 26,000 smart cards for use in storing user preferences while Hitachi Canada contributed 1,000 card readers for the pilot projects.

According to information available from the National Industry Canada Pilot Initiative, all 'Web-4-All' users are given a "smart card" similar in size to a debit or credit card, which contains their individual preferences, such as having text read aloud or type faces magnified. Every time they log onto a public access computer, the users simply insert their card into a reader and the computer adjusts to their preferences.



A person with disability puts assistive technology to use

'Web-4-All' is the first technology of its kind capable of automatically loading individual user preferences.

'Web-4-All' is an innovative technology that enables people with disabilities and low literacy levels, as well as seniors and people unfamiliar with computers, to use the Internet on public access computers. The hardware and software of 'Web-4-All' ensures the following in an extremely user-friendly manner:

- The visually-impaired and those who do not read well can have type faces magnified or text read aloud;
- persons with limited dexterity or who find it difficult to work with a standard keyboard or mouse can use tools, settings and displays that are easier to manipulate;
- those unfamiliar with the Internet can have websites displayed in a clear and consistent way, according to their preferences; and
- people who have low literacy levels or who are learning English as a second language can have text highlighted as the words are read out.

Appropriate linkages may be provided in a user-friendly manner to all the relevant websites of WHO, UNAIDS, National AIDS Commissions/organisations, state AIDS control agencies, NGOs and CBOs for facilitating access to HIV and AIDS-related information to people living with HIV and AIDS. Efforts should be made to adapt and replicate 'Web-4-All' in other parts of the world through active involvement of stakeholders in a bid to enhance awareness on HIV and AIDS. ■

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