

Digital libraries and the blind and visually impaired

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Introduction

- ensuring equal access to information for all – a prerequisite for the information society
- 3-5% of publications are made accessible to the blind (IFLA Libraries for the Blind Section)
- the blind and visually impaired can access original information on the WWW on their own
- barriers
 - assistive technologies and Web accessibility
 - linear information seeking behaviour

Assistive technologies

- Braille display – “screen” for the blind
 - accesses one line of the text at a time
- speech synthesizer (external hardware unit);
screen reader (software)
- Braille embossers
- scanner, OCR, text-to-speech software
- screen magnification software

downsides:

- **expensive**
- **low quality for minor languages**

Accessible Web sites (1)

- legislation in the European Union, in the United States and Australia - provides for accessible design
- Web content accessibility guidelines 1.0 (1999)
 - Techniques for Web content accessibility guidelines 1.0 2000 – detailed instructions
- examples of problems:
 - no alternative text, esp. when images used as links
 - functions controlled by mouse only
 - no title attributes, no frame names

Accessible Web sites (2)

- automated validation tools (Bobby, A-prompt)
- manual checking (different browsers, accessibility options, lynx)
- Non-visual access to the digital library (NoVA)
 - linear information seeking - the biggest problem is navigation when frames are being used
- Danish National Library for the Blind - Webcenter (2000)

Library catalogues (1)

- a need for a union catalogue of accessible formats
- efficient cross-searching of catalogues of accessible formats at the international level
- catalogues should include digital texts on the WWW (free and for the blind)
- including Braille holdings in national and regional catalogues is one of the principles in Guidelines for library service to Braille users

Library catalogues (2)

- **TESTLAB**
 - a European Union project
 - building a central catalogue of accessible library materials and adapting existing OPACs for the blind users
 - promoting establishment of computer workstations for the blind at local libraries
- **large online national catalogues of accessible formats**
 - U.K. National Library for the Blind
 - Canadian National Institute for the Blind
 - U.S. National Library Service for Blind and Physically Handicapped
- **MIRACLE**
 - a project for an international catalogue of Braille musical scores

Digital collections (1)

- free of charge
 - Gutenberg Project
 - IFLA Electronic collections
 - British Columbia Digital library's guides
- Framework of guidance for building good digital collections (IMLS 2001)
 - provides for accessibility to people with disabilities
- Austrian Literature Online – with i3s3 provides exam literature for blind and visually impaired students at Austrian universities

Digital collections (2)

- copyright – fair use : restricted for the blind
 - Bookshare.org (US)
 - Tiflolibros (Argentina)
 - UK: KnowUK, Online Originals, Talking Newspaper Association
 - Croatia: IPSIS -Digital collection for the blind and visually impaired with exam literature, literary works and other documents; Web portal with selected information resources and a system of assistance, whereby a blind surfer can ask for any kind for help
 - no fair use for the disabled

Conclusion (1)

- enforcing fair use for the disabled where absent in order to enhance creation of digital collections for the blind
- enforcing legislation on digital master legal deposit with access for the disabled
- promotion of Web accessibility
 - Croatia: none of the Croatian public libraries has a Web site that conforms to the most basic level of W3C's Web content accessibility guidelines 1.0

Conclusion (2)

- more cooperation could and should be invested at the international level in order to enhance services worldwide
 - online library catalogues of accessible formats
 - including bibliographic information on accessible formats in general public library catalogs
 - inclusion of remote digital texts from resources dispersed on the World Wide Web that are freely available as well as those restricted to the blind should also be enabled