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Personalisation and Accessibility: Integration of Library and Web Approaches

Abstract

Personalisation metadata can be used to enhance the accessibility of resources to people with disabilities.

Work is in progress to develop standards-based solutions in this area. This work includes:

- Enhancements to the **MARC** standard for library catalogues
- The **AccessForAll** initiative for e-learning resources.

This paper reviews the two approaches and argues for an approach which recognises potential problems which may arise from two independent approaches to the same problem.

Two Scenarios

The College Environment

Alex, a visually-impaired student uses a Virtual Learning Environment (VLE) to find recommended books and learning objects suitable for his distance learning course.

The Library Environment

At a public library, 14 year-old Bernie uses the library catalogue to find pictorially-rich information for her school project. However she finds nothing suitable for a dyslexic student. What can she do?



Two Possible Solutions

The MARC Approach

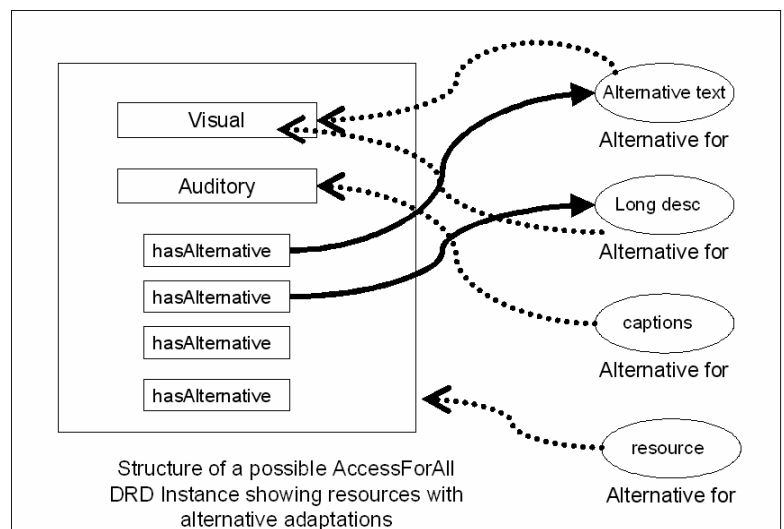
The **MARC 21** format is a metadata schema used in library catalogues. Over time MARC 21 has been extended to include other formats (e.g. audio, audio-visual, etc.) It can also hold information about the target audience (e.g. reading age, size and format of the resource, etc.)

There are proposals to further develop MARC21 to support richer searching e.g. filter out Braille resources; find 'audio cassette resources only; etc. This will enable the user to be provided with more focussed sets of results (e.g. if the user doesn't read Braille, or does not have access to an MP3 or CD player).

The AccessForAll Approach

The **AccessForAll** approach allows applications to deliver adaptations or variants of resources to meet particular needs, as illustrated.

AccessForAll is being implemented using a metadata approach and is being standardised by ISO and IMS.



Integrating The Approaches

Integration Is Desirable

There is a need to integrate the two approaches described. For example, a 'blended learning' approach, which is increasingly popular in the UK educational environment, there is a need to provide access to both digital and physical learning resources. This could be provided by a VLE making use of physical resources catalogued within a library catalogue.

Integration Challenges

Several challenges needs to be addressed:

- The interoperability of elements being proposed for MARC and AccessForAll
- The diversity of the organisational culture and processes of the two standardisation bodies
- Establishing convergence across multiple toolsets working with different software technologies in different communities
- Context-related constraints and freedoms in the library and library vendor sector and the wider Web and e-learning sector
- Identifying the business cases for deployment of the approaches discussed

Further Information

The paper is published in the WWW2006 Conference Proceedings and is also available online at <http://www.ukoln.ac.uk/interop-focus/publications/www2006/>.

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