Making online digital collections accessible to disabled people

2003 is European Year of Disabled People. Funding invested in online museums collections is set to grow exponentially. But how accessible exactly are online digital collections for some 8.6 million disabled people in the UK?

It does not take extensive research to realise just how many barriers disabled people face to the enjoyment of online cultural resources:

- A blind person will find the navigation of many websites frustrating if technical web accessibility standards have been ignored. Digital collections will remain an arid abstraction if they are not described.
- A deaf person who does not read – and many don’t; will see the digital images and may analyse them visually. However, their meaning cannot be fully decoded, because the necessary information is not being made available in sign language – now recognised as an indigenous language of the UK.
- A person with a learning difficulty and limited literacy is likely to find navigation of most websites a barrier. Scholarly and curatorial language will spoil the experience; not only to people with learning difficulties.
- Online collections in museums very seldom provide support for assistive technology such as tracker balls and text-to-speech readers. Digital screens cannot easily be operated by blind people.

Digitisation of collections has the power to make the inaccessible accessible, but all too often the lack of consideration for accessibility leads to new barriers, widening cultural exclusion and the digital divide. According to AbilityNet and the National Library for the Blind, at most a third of all websites meet existing web accessibility standards. Even those that do may not be ‘accessible’ in the fullest sense of the word. What should museums do to ensure that their online digital collections are accessible to all?

Government policies and legislation are unambiguous in their commitment to web accessibility for disabled people. Under e-government policies, public sector websites need to be accessible for disabled people by 2005 (and meet level 2 of the Web Accessibility Initiative (WAI) standards). The Disability Discrimination Acts puts a duty on service providers to make reasonable adjustments and to provide “auxiliary aids”, which make services more accessible. Accessible websites, description for visually impaired people, British Sign Language for deaf people, as well as easy English and image support for people with learning difficulties are all examples of auxiliary aids. Other examples include text and subtitles as an alternative to audio for people with a hearing impairment, as well as audio and large print for people with dyslexia. The main challenge for museums is to develop management models for the development of digital collections, which enable them to build accessibility into the design – using whatever resources are available purposefully.

Web accessibility is about far more than making websites accessible to disabled people. Bad design affects every user, irrespective of disability. True, a person who can see the screen clearly may be able to use visual cues to work their way around on a poor or inconsistent navigation system, but their progress is nevertheless impeded. Accessibility is never the result of an afterthought. It arises from the very nature of technology itself and inclusive planning and design.
In that sense, we need to think of accessibility as an integral part of online digital collections. As we adopt this outlook, solutions start to present themselves.

We will be eager to get to know existing web accessibility standards and validation tools, their uses, potential and limitations. Not every website which meets the standards will be fully accessible to users, but it is a good start. Once a requirements to meet technical web accessibility standards have been written into web design briefs – and we feel more confident about newfound knowledge; we will inevitably begin to explore the unique contribution museums can make to web accessibility. We will start to think how online collections can be presented and interpreted to a variety of audiences, among them disabled people. And the news is good! It is a matter of “importing” the best skills museums have developed onsite in meeting the needs of disabled visitors over the last two decades. It is about meeting new communities, to learn from them and involve them. There is much expertise among disabled people, teachers, disability organisations, sub-titlers, sign language interpreters and audio describers for TV and theatre.

Box 1: Focus on good practice: The Jodi Mattes Award for the most accessible website (2003)

Compliance with technical web accessibility is the cornerstone to content accessibility of online cultural and heritage collections. This is why the first Jodi Mattes Award for the most accessible museum, gallery and heritage website was given in May 2003 to the National Maritime Museum (NMM), although some contenders showed a markedly higher level of imagination in interpreting collections for disabled people. For users this commitment expressed in a website which:

- Is easy to navigate
- Provides good contrast between text and background
- Briefly describes graphics, using the ALT attribute
- Offers the possibility of changing the size of the text with browser controls
- Has style sheets to control screen appearance

The NMM website demonstrates that it is perfectly possible to have a ‘professional’-looking site which meets accessibility standards. HTML and related languages are there to enable, not restrict us in the presentation of our information. In fact, it is most often when these languages have been misused that a website becomes inaccessible. New technologies such as Cascading Style Sheets and XML have the potential vastly to enhance accessibility once we are comfortable with their use.

The judges, who included staff from the Museums Computer Group, Leicester University, the Royal National Institute for the Blind, Metropolitan Museum of Art and Resource, gave a special commendation for innovation to the Tate i-Map webpages. The site introduces blind and partially sighted people to the work of Picasso and Matisse and key concepts of modern art. I-Map paves the way to a whole new way of making online heritage collections accessible to visually impaired. Of striking quality are the use of:

- strengthened colour contrast, which heightens the visibility of the art works online
- descriptions
- visual analysis starting from detail and gradually reconstructing the whole painting
- animation (in slow pace) to illustrate the transformation of figurative art into abstract art
- outline drawings which can printed off at home and in schools and transformed into tactile images on “minolta/thermoform copiers” for blind people.

It is also worthwhile learning from the drawbacks of the Tate I-Map site, which include:

- the print size can’t be changed, which presents partially sighted users with barriers
- the site is based on frames, but users whose browser does not support frames will only see a blank page

Box 2: Do’s and don’ts

Do:
- Think about accessibility from the beginning of any web project
- Read through the technical standards from the Web Accessibility Initiative
- Look at ways of making content accessible
- Include accessibility in your design brief
- Ensure staff and suppliers are aware of their responsibilities in this area
- Respond to user feedback about the accessibility of your website

Don’t:
- Let suppliers or ICT departments tell you that accessibility isn’t compatible with their standard web templates
- Accept an ‘accessible’ site that hasn’t been validated
- Pay extra for accessibility
- Assume that just because a site looks fine on your computer, it will on everyone else’s
- Use interactive or animated content simply because you can

Conclusion
Web accessibility is integral to what a website is and does. It is not about spending more money on accessible features. It is about making the right choices and being responsible in how we use technology. An accessible website may take “10 per cent” more time to develop, but the investment of time will benefit all users, not just those with disabilities. Accessibility has to be written into design briefs and specifications to ensure that it is never simply an optional extra.

For any museum considering a digitisation project, the first port of call must be the technical standards developed for the New Opportunities Fund digitisation programme. These are available free of charge at http://www.peoplesnetwork.gov.uk/content/technical.asp and represent a collection of the best current thinking in digitisation and accessibility.

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Resources
Web accessibility standards and guidance
www.w3.org/WAI
report on how disabled people use the web:
www.w3.org/WAI/EO/Drafts/PWD-Use-Web/Overview.html
www.abilitynet.co.uk
http://bpm.nlb-online.org/
www.mrib.org.uk/digital

Online access to cultural and educational resources
www.ukoln.ac.uk/nof/support/help/papers/writing-web
www.mencap.org.uk/html/easytoread/easytoread/htm
www.culturalcontentforum.org/intro/html

A few online cultural resources
www.thebritishmuseum.ca.uk/compass (NLB Visionary Design Award)
http://tours.daytonartinstitute.org/accessart
www.fng.fi/hugo
www.nmm.ac.uk (Jodi Mattes Award; NLB Visionary Design Award)
www.tate.org.uk/imap (Jodi Mattes Award commendation; BAFTA Award)

Access for disabled people/DDA
www.drc-gb.org
www.resource.gov.uk/action/learnacc/00access.asp#3 (extensive guidance)