

Information for Everyone: Designing Accessible Websites

In May 2001 the Special Educational Needs and Disability Act (SENDA) received royal assent. The contents of this Act will become Part IV of the Disability Discrimination Act (DDA) 1995 and therefore, will bring the fields of further and higher education under the protection of this legislation. In the remainder of this paper I will examine the implications of SENDA on the use and development of websites of higher education institutions, provide some guidelines on accessible web design and finally offer some sources of further information on this important issue.

The SENDA legislation will make it illegal for higher education institutions to do two things:

1. Treat disabled people less favourably than their non-disabled peers, for a reason relating to their disability;
2. Fail to provide reasonable adjustments for disabled students.

SENDA seeks to ensure that Disabled students have access to the full range of educational opportunities and services that the University provides. The legislation covers disabled students from the point of enquiry about the institution, to open days, through the admissions process and during the time they are a matriculated student at the University. 'Services' refers not just to the dining hall or faculty library, but also refers to the full range of learning and teaching environments and the information and technology within these environments. Therefore, general information on websites and any virtual or distance learning activities that a department or college engages in must be accessible to disabled people.

Furthermore, SENDA is an anticipatory Act, which means that higher education institutions owe a duty to disabled people as a whole, not just those individuals sitting in their tutorial rooms. Therefore, colleges and departments need to be making their websites accessible regardless of whether they currently have disabled students enrolled or not.

Unfortunately, the development of websites has not always taken into consideration the needs of disabled people. However, as outlined above the introduction of the SENDA legislation ought to prompt changes in the way websites are developed in Higher education institutions.

The students most likely to experience difficulties in accessing websites are those students who find accessing printed material difficult, namely, students with vision impairments and those with learning difficulties for example, Dyslexia. However, profoundly Deaf students and some students with physical disabilities may also experience difficulty accessing the web, due to the type of language used and the physical navigation requirements of websites respectively.

Many disabled students use a range of adaptive technology (both hardware and software) that enables them to use computers and indeed the Internet. However, in order for adaptive technology to work in conjunction with the Internet, websites must contain certain accessibility design features. Below, are a few examples of how websites can be made more accessible to people with various impairments.

For people with vision impairments who use screen reading software e.g. JAWS which reads the contents of the screen aloud to them, it is vital that:

- Links make sense out of context, many screen readers will read a list of links that appear on a web page, if a link merely says 'click here' it will not be apparent what that link is for and so will not provide accurate information about the contents of the page.
- Alt text is provided on all graphics. Screen readers are not able identify graphics. Therefore, it is important that all graphics contain a brief description of what they are about. This will show up as text in a box when the mouse hovers over the graphic. For people using screen readers, they can ask the screen reader to describe the contents of sections of the screen. When a screen reader finds a graphic in the chosen section it will read out the alt text associated with it.

It may be useful to offer a text-only version of your website and it would certainly be useful if all visual information e.g. tables were also accompanied by a written description of that information. Visual information is useful to students with dyslexia and hearing impairments. However, it needs to be accessible to all people.

For people with some usable vision who might be using screen enlargement software e.g. Zoomtext, it is important that there is:

- Flexible colour and font settings. Many students find particular colours and backgrounds easy to read and other colours might make access to the site impossible. Therefore, if the student is able to adjust the colours and font size on the site, it will be more user-friendly.
- High contrast, most students with vision impairments also benefit from having a high contrast between background and foreground colours on a screen. For example, dark text (black) on a light coloured background (pale yellow) will make the text easier to read. Poor contrast can make a site almost impossible to read for many disabled users.

Many students with Dyslexia will also benefit from the above two adaptations. However, they may also benefit from:

- A site map, for ease of navigation;
- Documents being available to read off-line, as reading is often a slower process for people with Dyslexia and vision impairments.
- Not having too much text on a page, that is, making good use of blank space in order to make a document easier to read.

Students who are Deaf and British Sign Language (BSL) users will benefit from information written in plain, simple English, with diagrams to supplement the text.

BSL is a completely different language to English with its own grammatical structure. Therefore, for BSL users, English is often their second language. Simple English will also benefit other people whose first language is not English.

Finally, for students who experience difficulty with fine motor control, it will help if links and icons are large and have sufficient space between them.

If you would like to know more about technology for disabled people in higher education, web accessibility guidelines and/or how to check if your site is accessible, below are some useful links for this information.

www.techdis.ac.uk - provides information for the further and higher education about technology and disability/learning difficulty.

www.cast.org/bobby/ - Bobby allows a website or portions of a website to be checked for accessibility and provides a written report, giving details about how the site can be made more accessible.

<http://www.w3.org/WAI/> - This site contains the latest Web Accessibility Initiative Guidelines about making websites accessible to disabled people.

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