

Welcome to this special issue of the Learning Technology supplement. This issue highlights new legislation coming into force in September which has major implications for any staff who publish information on the Web. Staff from many departments and teams have contributed to this issue and thanks are extended to all of them for their contributions, comments, advice and support.

Learning Technology 8

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Why do you want a website anyway?

New legislation (see page 2) has major implications for any staff involved in producing Web pages. All staff involved in Web publishing should review their pages in the light of this legislation. Information seminars (see back page) are to be held on 12th June. Although this supplement focuses on making your website as accessible as possible, there is no point having a fully accessible, attractive website if it has no real purpose and if your students or target users don't ever visit it. Before you go to the bother and effort of building a website, stop for a moment and ask yourself a couple of questions: "Who is this website for?" and "What is the user supposed to gain from using this site?" Websites can have many purposes, from attracting potential students to your course to publicising your excellent research activities. They can be used to provide up-to-date information or to act as a resource base or to give the students a self study centre, or... Whatever your reason, it has to be clear and appropriate for your users. If your users can't see a purpose for using the site, they won't.

So, you have thought long and hard about whether a website is really appropriate for the task in hand, and you have designed with that purpose firmly in mind. But be cautious. Just because you have access to SPSS or Minitab doesn't mean you should be designing and analysing statistical experiments. Equally just because you have access to FrontPage or DreamWeaver doesn't mean you are an expert Web designer. By all means have a go, if it interests you. But be aware of your level of experience and perhaps your limitations, certainly be aware of your legal responsibilities. Do use the variety of support tools, validators and checkers available to you, a selection of which are described on the following pages. Maybe go on a training course. Seek feedback from your users, and use that feedback to adapt, develop and improve your site.

World Wide Web Consortium (W3C) Quicktips

Making a website fully accessible is a large task which requires a certain degree of specialist knowledge (see elsewhere in this special issue for details).

However the W3C organisation has, as part of its Web Accessibility Initiative (WAI) issued a set of "Quick Tips" which anyone creating a website should use. Don't be put off if you don't understand all the terms used here, but for those with a bit of knowledge these tips give a good pocket-sized guide. They provide some accessibility for many users, at a level which is readily achievable, especially if taken into account as the pages are created. The WAI site itself provides very detailed guidelines and examples, so if the brief tips below appear cryptic, visit <http://www.w3.org/WAI/> for more details.

- Images & animations. Use the **alt** attribute to describe the function of each visual.
- Image Maps. Use client-side **MAP** and text for hotspots.
- Multimedia. Provide captioning and transcripts of audio, and descriptions of video.

- Hypertext links. Use text that makes sense when read out of context. For example, avoid "click here".
- Page organisation. Use headings, lists, and consistent structure. Use **CSS** for layout and style where possible.
- Graphs & Charts. Summarise or use the **longdesc** attribute.
- Scripts, applets and plug-ins. Provide alternative content in case active features are inaccessible or unsupported.
- Frames. Use **NOFRAMES** and meaningful titles.
- Tables. Make line-by-line reading sensible. Summarise.
- Check your work. Validate. Use tools, checklist and guidelines at <http://www.w3.org/TR/WCAG/>

Checklist © W3c (MIT, INRIA, Keio)
2000/02

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The Special Educational Needs and Disability Act

With thanks to Sophie Corlett, Skill



The Special Educational Needs and Disability Act was given Royal Assent on 11 May 2001, and will begin to come into effect from 1 September 2002. The Act removes the previous exemption of education from the Disability Discrimination Act (1995), ensuring that discrimination against disabled students will be unlawful. Institutions will incur additional responsibilities in 2003, with the final sections of legislation coming into effect in 2005. The legislation will apply to the UK, with the exception, at the moment, of Northern Ireland. As the Act is an amendment to the existing Disability Discrimination Act 1995 (DDA), it only protects people defined as disabled according to that legislation. This definition is based on an individual's ability to carry out 'normal day-to-day' activities, and so may exclude some students who are usually considered disabled by the support systems within their institutions. Under the new law all publicly-funded further and Higher Education institutions, sixth form colleges, schools providing adult education, and local authorities when they provide further, adult or community education or training will have responsibilities.

What will Institutions have to do?

Less favourable treatment

It will be unlawful for institutions to treat a disabled person 'less favourably' than they treat, or would treat, non-disabled people for a reason which relates to the person's disability. For example, it would be unlawful for an institution to turn a disabled person away from a course, or mark them down in an assessment, because they had dyslexia or were deaf.

Adjustments

Part of not discriminating is making 'adjustments'. If any arrangements at the institution place a disabled person at a 'substantial disadvantage', the institution is required to take such steps as are reasonable to prevent that disadvantage. From September institutions will be required to change policies and practices, for example:

- Allow disabled students more than the usual 'one hour at a time' access to University computers.
- Allow disabled students to use computers for examinations.
- Waive the usual charge for access to the University intranet from students' home computers for disabled students who need it.
- Make disabled students wait no longer than other users to get their computers fixed by technical support staff.
- Introduce a policy of checking all new electronic courseware to ensure it is accessible to disabled students.

From 2003 institutions will need to provide auxiliary aids and services where these would help to prevent substantial disadvantage. Examples might include:

- Installing induction loops into classrooms.
- Introducing specialist software on computers for a visually impaired or dyslexic student.
- Providing training for IT support staff on working with disabled people and their equipment.
- Providing handouts in Braille or other formats.
- Purchasing specialist technology for a science student with mobility difficulties to work safely in the lab.

From 2005 institutions will also need to make physical adjustments. All institutional services except for education must make physical adjustments from 2004 because they are already covered by Part III of the DDA. The main implication of the 2005 date, therefore, will be for education itself, which is exempt from the 2004 requirements.

The new provisions do not require institutions to lower academic standards to accommodate disabled students. An institution would be 'justified' in discriminating in such circumstances. Institutions will only be required to make adjustments where these are considered 'reasonable'.

Whether an adjustment is reasonable will depend on:

- Academic standards.
- The institutions' resources.
- Other financial resources or services available to the student (institutions will not, for example, have to replicate the services that some higher education students may get from disabled students' allowances).
- Cost.
- Practicality.
- The availability of services/aids from other sources.
- Health and safety.
- The relevant interests of other students.

The duty to make reasonable adjustments is a duty to disabled people generally, not just to particular individuals. The 'anticipatory' aspect of this duty means that institutions need to consider what sort of adjustments may be necessary for disabled people in the future, and where appropriate make these adjustments in advance. It is not enough to wait until a disabled student requests that the intranet is made accessible: institutions should be ensuring accessibility in advance.

Skill promotes opportunities for young people and adults with any kind of disability in post-16 education, training and employment across the UK.

Chapter House,
18-20 Crucifix Lane,
London SE1 3JW
Telephone/ Minicom: 020 7450 0620
Email: skill@skill.org.uk
<http://www.skill.org.uk/about/>

What is valid HTML?

HTML is a standard markup language which is specified by the **World Wide Web Consortium (W3C)**.

W3C is a body consisting of representatives from industry, commerce and education who decide on the HTML rules. These rules are known as the W3C recommended specification. Pages which adhere to the W3C specified rules are known as valid HTML pages.

Why should I make my pages valid?

Publishing valid HTML pages ensures the maximum possible audience for your Web pages.

If your pages contain invalid HTML the user reading your pages may not see the information as you wish them to see it or even worse, they may not be able to read your information at all. Publishing valid HTML pages ensures that most browsers will be able correctly to interpret and display your pages regardless of what type of computer or browser is being used.

When are pages NOT valid?

A page is NOT valid if:

- the file contains HTML elements which are not part of the **W3C recommended specification** and produces errors when run through the **W3C validator** (<http://validator.w3.org/>) or the **Edinburgh University HTML validation service** (<http://webhelp.ucs.ed.ac.uk/services/validator/>).
- end tags for certain elements are omitted.
- elements are in the wrong order.
- key components of an HTML file are omitted, for example, the HTML, BODY, HEAD elements or the !DOCTYPE declaration.

Software vendors such as Netscape and Microsoft have introduced their own markups which are not part of the W3C recommended specification. These may work with a specific browser at a particular time but there is no guarantee that they will work with other browsers or future releases of a particular browser.

Arthur Wilson, *Computing Services*

How do you know if your Web page is accessible?

The design of Web pages which are viewable to all will soon no longer be merely a moral concern, but a legal requirement. Designing truly accessible Web pages is a skill that cannot be gained overnight and cannot be entrusted to Web authoring packages. Designing accessible Web pages is a skill that all Web designers should be working to master, and the first thing to realise is that, just as none of us is perfect, none of our websites is perfect either.

The first requirement in improving our websites is to see where they could do with improvement. There are a number of guidelines and checklists to help. You don't need to learn all of the guidelines all at once—and understanding them does require a certain level of technical knowledge—but do be ready to go back and re-read the sections, especially when particular problems are highlighted by some of the checking tools referred to later.

There are some automated Web page checking tools that should be used to start you off:

- **Check and correct with built-in tools in your Web editor.**

Most Web editors have some facility for ensuring that a page is properly written HTML and conforms to the basic requirements in the accessibility checklists. If you are using an editor that has this feature then remember to use it.

- **Check and correct with HTML Tidy.**

This is very useful little tool called HTML Tidy which is available from the World Wide Web Consortium (W3C) at <http://www.w3.org/People/Raggett/tidy/>. It can be used to correct errors in HTML and warn about some accessibility issues.

- **Check with HTML validator and correct errors.**

For a page to conform to the second level of accessibility guidelines it should conform to one of the officially published versions of HTML.

W3C has provided a tool to check your pages (<http://validator.w3.org/>). The output of this might take a bit of understanding as it refers to fairly technical documentation. There is also the University validator provided by Computing Services at <http://webhelp.ucs.ed.ac.uk/services/validator/>

- **Check with an Accessibility tool and correct errors.**

Bobby (<http://www.cast.org/bobby/>) and Wave (http://www.temple.edu/inst_disabilities/piat/wave/) are examples of free on-line tools which will examine a Web page and report back on possible errors. The reports are usually quite well written and point to techniques for fixing major accessibility errors in pages. However not all the checklists are suitable for automated checking and you should read the reports with care.

Graham Rule, *Computing Services*

See also the *Quicktips* on page 6.

Different Needs: the impact and some solutions

Introduction

On-line learning materials demand use of a computer, and currently computers are usually supplied with a CRT monitor, QWERTY keyboard and mouse. Learners may have difficulty with the standard keyboard or mouse because of poor motor control (e.g. due to cerebral palsy), muscle weakness (e.g. due to muscular dystrophy), or pain (e.g. due to repetitive strain injury—as currently suffered by this author!). Many people have visual or perceptual problems with the standard computer desktop. Difficulties of access are probably much more common than we think: I suspect that almost all computer users will suffer pain or discomfort at some time. Therefore it is essential that IT managers, service providers and content authors are aware of these difficulties, and more importantly the measures that can be taken to alleviate them.

Physical access

Many difficulties can be helped quickly and easily by adjusting keyboard and mouse settings in the computer Control Panels. The keyboard repeat rate can be slowed down or turned off and delays added for people with tremor. The mouse speed can be slowed down, large pointers selected, double-click speed adjusted, and menus and dialogue boxes accessed using keyboard instead of mouse. The websites listed at the end of this article give more information, and instructions on adjusting Control Panels.

If these simple adjustments are not sufficient, there is a range of keyboard and mouse adaptations and alternatives. RSI sufferers may benefit from inexpensive wrist rests and/or ergonomic keyboards, or a trackball instead of a mouse. People with poor motor control can use keyguards, or enlarged keyboards, while those with severe physical difficulties might use speech recognition or a head-operated mouse and an 'on-screen' keyboard.

The key message for those providing on-line materials is not to assume use of the standard access tools.

Visual impairment

Learners with a small degree of visual impairment may find that adjustments in the Windows Display Control Panel can help. For example, the standard tiny Windows menu font can be enlarged, or complete large-font, high-contrast colour 'schemes' chosen. Learners with a more severe visual impairment may need the screen magnified by say, eight times, together with text-to-speech output of the screen contents, and so will need a specialist screen magnification (e.g. Zoomtext, Lunar) or 'screen reading' program such as HAL or Jaws. As well as the screen readers which can read anything on the monitor, from word processor to Web browser to programming environment, there are 'talking' Web browsers—pwWebSpeak and IBM Home Page Reader* which are for visually impaired users.

Dyslexia and other reading difficulties

Better identification of dyslexia and a widening of access to Higher Education has led to a ten-fold increase between 1993-4 and 2000-2001 in the number of students at the University of Edinburgh declaring some form of dyslexia. Many of these students will have some reading, short-term memory, or perceptual difficulties.

Some students find it tiring or painful to read large amounts of white text on a black background and are more comfortable with blue text on pale yellow, or have difficulty with small serif fonts (e.g. Times), preferring sans-serif fonts such as Arial, Helvetica or Comic Sans. Newer Web browsers allow the user to set a default colour and font size for the display to their own preferences. For reading longer texts on-screen, or for proof-reading, some students with reading difficulties find text to speech helpful. Screen readers for dyslexics have a different set of features to those for visually impaired users, and include textHelp Read and Write, Keystone and Kurzweil 3000*.

* More information

The programs marked with * are available for trial in the LRC in the Main Library, and there is also a selection of keyboards, trackballs and mice. The CALL (Communication Aids for Language and Learning) Centre also has a wide range of access devices and software on display.

Information on Control Panel adjustments can be found in the computer's Help system and on the websites below.

Microsoft Accessibility website

<http://www.microsoft.com/enable/>
CALL Centre

<http://callcentre.education.ed.ac.uk/>
Apple Disability Site

<http://www.apple.com/disability/>

Learning and Resource Centre

<http://www.asg.ed.ac.uk/lrc/>

TechDis

<http://www.techdis.ac.uk/>

Paul Nisbet, CALL centre

The CALL (Communication Aids for Language and Learning) Centre provides a range of services and conducts research and development projects in the area of special educational needs, disability, communication and learning.

CALL centre: Paterson's Land

Tel: 651 6235

Email: callcentre@ed.ac.uk

<http://callcentre.education.ed.ac.uk/>

TextHelp Read and Write

<http://www.loriens.com/front.asp>

Zoomtext

<http://www.aisquared.com/>

Lunar & HAL

<http://www.dolphinuk.co.uk/>

IBM Home Page Reader

<http://www-3.ibm.com/able/hpr.html>

Jaws for Windows

<http://www.freedomscientific.com/>

Kurzweil 1000 & 3000

<http://www.kurzweiledu.com/>

pwWebSpeak

<http://www.soundlinks.com/pwgen.htm>

Web Tools and Accessibility

Web Editing Tools

Gone are the days when you needed to code websites using a text editor. The introduction and development of powerful Web publishing tools such as HoTMetal, DreamWeaver and FrontPage now make it relatively easy to create interesting and media-rich websites. However, nearly all of these tools introduce code which is inaccessible without warning the author or indicating how to fix the problem.

Some of the more common problems introduced by these tools are:

- Images without alternative text
- Inappropriate colour contrasts between pages, text, tables and other elements
- Fixed rather than scalable sizes for table cells and fonts
- Table cells without headers
- Misleading hypertext link text

The Editing Tools section of our Web Authoring Good Practice Guide contains links to resources for users of the more common editing tools on how to create more accessible websites (see <http://webhelp.ucs.ed.ac.uk/docs/goodpractice.html#tools>).

At this point we must add that fixing the problems outlined in this article will not guarantee that your page is accessible and that you should check your pages using tools such as Bobby at <http://www.cast.org/bobby/> and make any necessary adjustments. You should also read the Web Content Accessibility Guidelines 1.0 at <http://www.w3c.org/TR/WCAG10/wai-pageauth.html>

Depending on the complexity of your Web pages, you may also need to edit the HTML source code in order to make your pages accessible. The main editing tools all allow you to edit the HTML source and view the WYSIWYG results of any changes you make. If you need to learn more about the HTML mark-up language and how Web pages are constructed, we offer an HTML and Web page publishing course. EUCS also runs a HoTMetal course and plans to run a DreamWeaver course next term. All these courses contain sections on how to create accessible Web pages.

For more information about HTML and specific Web editor courses, see <http://www.ucs.ed.ac.uk/usd/iss/courses/> and for help on using the Web at Edinburgh see <http://webhelp.ucs.ed.ac.uk/>. If you need advice on making your web-site accessible then contact your EUCS Support Team.

Arthur Wilson, *Computing Services*

Screen Reader Simulation

Screen readers are sometimes used by visually impaired computer users to translate Web pages into a spoken format. A synthesised voice "reads" the pages out loud. If a Web page has been badly written this can result in at best a confusing output or at worst a nonsensical babble. You can hear for yourself the sorts of problems that can occur by visiting the artificial website of the University of The Antarctic at <http://www.webaim.org/simulations/screenreader/>

PowerPoint

Many staff are using PowerPoint slides in their lectures, and increasingly these are then being posted to the Web so that students can view or download them later. There is a choice of ways to do this – the original PowerPoint file (.ppt) can be provided, or you can use the 'Save as webpage' option from within PowerPoint.

Publishing the original .ppt file works well for most students, as long as they have the PowerPoint viewer plug-in installed, and most search engines can now search the content of the slides as well as the content of the Web pages. However one outstanding problem with both .ppt and web-saved versions is that the slides are inaccessible to anyone using a screen reader, and you should therefore provide some alternative. In addition the direct 'Save as webpage' option only works reliably in later versions of Explorer and might not work in Netscape at all.

The sites <http://www.webaim.org/howto/powerpoint> and <http://www.tsbvi.edu/technology/powerpoint.htm> both provide an interesting discussion and examples of some of the problems that may occur along with links to other sources of support.

There is now a PowerPoint WWW publishing accessibility wizard in beta testing stage available for download at <http://www.rehab.uiuc.edu/ppt/> which may offer a solution in the longer term. I haven't used it, and I believe the installation process is tortuous, but I'd be very interested to hear from anyone who has tried it.

In addition to difficulties with mounting PowerPoint presentations on the Web, when creating your slides you should also consider whether you are using appropriate font and colour combinations. There are examples at <http://www.sig.enst.fr/~brettel/colourblindness.html> including interactive java applets to demonstrate colour blindness.

Nora Mogey, *MALTS*

It might look OK on YOUR browser but...

1 Try with a variety of browsers

Don't assume that everyone has exactly the same computer setup as you. They may have different browsers or operating systems. Try to check your pages with both Internet Explorer and Netscape. But also try some of the newer browsers such as Opera (download from <http://www.opera.com/download/>) and Mozilla (from <http://www.mozilla.org/>) and the text-only browser 'lynx' (available on the central Unix services, or there is an emulator available on the Web at <http://www.delorie.com/web/lynxview.html>).

2 Try with a variety of accessibility tools

Many people with disabilities will be using specialist tools to use websites. Try your site with audio browsers (e.g. IBM Home Page Reader), screen readers (e.g. Jaws) or screen magnifiers available in the Learning and Resource Centre.

3 Try with low-res screens & large fonts

Many people use relatively large fonts on small or low resolution screens. Websites that assume a particular page size will almost always not be accessible on such screens. Do you use tables or frames that provide a fixed size banner and a fixed size navigation bar at the left? How well does this work for someone who uses large fonts? Do they see all the text of your navigation bar? Once the banner and left bar have appeared, is there any space left for the main content of your page?

4 Try on low-colour (or mono) screens

You are probably using a really nice high-colour monitor setting. Can someone use your site if they have a limited number of colours available? What if they need to use only black and white (or some other high contrast combination) in order to see the screen? Can they see anything on your page? Have you designed your site to allow them to change colours? Remember, there are a lot of people with a degree of colour deficiency.

5 Try without mouse (navigating, form input and checkboxes)

Can your website be used by someone who does not have a mouse or who only has limited ability to point and click? The HTML standard allows tabbing between input fields and selectable items. Have you written your pages so that this is easy to use? Go to a Web page with a form including checkboxes and see if you can select them without a mouse. If you have a mouse, do you have to click on the checkbox itself or has the text describing the box been properly marked up as a 'label'?

6 Try without images

If someone is using your site with no images loaded, can they get all the information they need and navigate? Remember, all images should have the 'alt' attribute to give a meaningful text alternative to what is shown in the image. Has your site used 'image maps' for navigation? If so, check that you have provided appropriate alternatives and titles for each of the map's active areas.

7 Try without frames

Have you remembered to provide an alternative to any 'frameset' that you use? A message saying that 'This site uses Frames, get a better browser' is *not* an acceptable alternative! Some people may need to use your site without using frames.

8 Try without plug-ins (e.g. Java, Flash)

As more visually exciting features become available it is very easy to get carried away with using them. What happens if someone without Flash enabled tries to use your site? Do they get prompted to download a plug-in which they may not want or have difficulty downloading or installing? Java applets may be useful but are not supported on all browsers. Are they absolutely required for your site or are they icing on the cake? If you have written your applets recently have you used the Java Accessibility Utilities?

9 Try without external readers (e.g. Adobe PDF, Microsoft Word)

Don't assume that your users use a particular sort of computer or have particular programs available. Can someone use your site if they don't have Microsoft Word installed? Have you relied on PDF files to give important information? If so have you written these PDFs with Acrobat 5.0 and used its accessibility features?

Graham Rule, *Computing Services*

Adobe Acrobat and accessibility

When is a PDF not a PDF?

The Adobe Acrobat 'Portable Document Format' (PDF) is a marked up (cousin of PostScript) file format that can be read on almost any computing platform using the proprietary (and free) Acrobat Reader. Converting a document to PDF can retain the formatting of the original document including embedded fonts, and it can compress it significantly, allowing for easy exchange across the Web or by email. It is an easy and reliable format for exchanging documents, especially if formatting and file size are a concern.

PDF files can be created in a number of ways and to different levels of PDF compliance. 'Print to PDF' in Microsoft Office for instance creates a PDF 1.1 file without many of the compression and associated features and benefits. Only if you are using Acrobat Distiller (part of the full commercial Acrobat suite) to create PDF files do you get all of the features of PDF level 1.3. Furthermore PDF files are relative 'dead-ends': they cannot be transformed into anything else and they are locked into the presentation of the original document. Adobe has reacted to the pressure for providing accessible computing by increasing the potential accessibility through specific features of the latest version, Acrobat 5.0.

If you are using Acrobat Reader 5.0 you can potentially read Adobe PDF documents with Windows-based screen readers (from vendors such as Freedom Scientific and GW Micro), use keyboard shortcuts, view documents in high contrast mode, zoom in on text, and reflow to fit any size view when working with tagged (accessible) Adobe PDF files.

However there are already constraints. Accessible tagged PDF files can currently only be made and used for and in a Windows environment, breaking their 'many platforms' principle. The tagging can only be done from the full Acrobat 5.0 suite on Windows, excluding any other form of making PDF files such as 'print-to-pdf' and other third party solutions. Earlier versions of the reader are not supported.

The result is a world with many shades of PDF and no absolute standard. PDF files can be made accessible for users on certain systems with the appropriate tools but this is by no means a standard. Anyone not using the Acrobat suite can expect their PDFs to appear as opaque 'blobs' to anyone with any more than basic accessibility needs.

See <http://www.adobe.com/products/acrobat/solutionsacc.html>

Rachel Ellaway, *MVM Learning Technology Section* (rachel.ellaway@ed.ac.uk)

How the Disability Office can help

The Disability Office supports students to purchase computing and other equipment by helping them to apply for Disabled Students' Allowance (DSA) or the University's Disabled Students' Support Fund (DSSF), when they don't qualify for DSA. Students are advised to try out equipment available in the Learning and Resource Centre, and if the technological solutions for an individual student are particularly complicated the Disability Office may refer students either to an Access Centre or to the CALL Centre for a comprehensive assessment of need.

EUCS staff work closely with the Disability Advisors to provide specific advice, to provide specifications for equipment, install software, help students to order equipment and help solve individual technological problems.

For directors of studies, course organisers and other staff there is advice about how best to support students with any impairment on the disability office website <http://www.disability-office.ed.ac.uk/> or simply contact a member of disability office staff.

The disability office is located in South College Street and is open:

10-1, 2-4 Mon, Tues, Thurs, Fri and
10-1 Weds.

Tel: 650 6828

E-Mail: Disability.Office@ed.ac.uk

Marnie Roadberg, *Disability Office*
(Marnie.Roadberg@ed.ac.uk)

Home Page Reader

Staff and students can now use IBM's screenreading software, Home Page Reader, at computer sites throughout the University. Home Page Reader is designed to help computer users who are blind or visually impaired to read Web pages. Using a text-to-speech synthesizer, Home Page Reader speaks the content of Web pages including text, frames, image and text links, alternative text for images and tables.

Home page reader is available in all the Open-Access Computing Labs, the Learning and Resource Centre on the second floor of the Main Library, George Square, and some departmental computing labs.

David Findlay, *Learning and Resource Centre* (D.Findlay@ed.ac.uk)

Support Organisations and Information

SENDA - Special Educational Needs and Disability Act (2001)

<http://www.hmsa.gov.uk/acts/acts2001/20010010.htm>

Technologies for Disabilities Information Service

<http://www.techdis.ac.uk/>

TechDis is a Joint Information Systems Committee (JISC) funded service supporting the Further and Higher Education community in all aspects of technology and disabilities and/or learning difficulties.

British Dyslexia Association

<http://www.bda-dyslexia.org.uk/>

National Disability Team

<http://www.natdisteam.ac.uk/>

The National Disability Team is funded by the Higher Education funding bodies of England and N.Ireland to manage and co-ordinate projects to enhance disability provision.

Royal National Institute for the Deaf

http://www.rnid.org.uk/html/info_factsheets.htm#edu

This site provides teaching strategies to use with deaf students—advice for lecturers in Further and Higher Education.

World Wide Web Consortium

<http://www.w3.org/>

The World Wide Web Consortium (W3C) creates Web standards. W3C's mission is to lead the Web to its full potential, which it does by developing technologies (specifications, guidelines, software, and tools) that will create a forum for information, commerce, inspiration, independent thought, and collective understanding. In particular they provide Web accessibility guidelines which can be found at <http://www.w3.org/WAI/Resources/#gl>

Seminars

Two half-day seminars have been arranged for staff who publish Web pages. These will provide an overview of the Special Educational Needs and Disability Act, demonstrate typical problems and pitfalls, and give guidance and advice on correcting existing sites. All staff who publish on the Web are strongly encouraged to attend. These events will not be highly technical in nature, and are intended to inform academic staff who also publish some Web pages.

The two seminars will be held at The King's Buildings (morning) and at George Square (afternoon) on Wednesday 12th June. Bookings (there is no charge) can be made online at <http://webdb.ucs.ed.ac.uk/malts/events.cfm>

Tools and Advice

Bobby

<http://www.cast.org/bobby/>

Bobby is a tool to help Web authors check the accessibility of their sites. Single pages can be submitted for checking on-line or the software can be purchased to review entire sites. Bobby produces a report advising where accessibility problems may occur.

Wave

http://www.temple.edu/inst_disabilities/piat/wave/

Wave is another on-line tool which comments on the accessibility of websites.

Betsie

<http://www.bbc.co.uk/education/betsie/>

Betsie can provide an on-the-fly text-only version of every page on your site which can be (more or less) guaranteed to be accessible, and can be modified to include features of code manipulation that are wholly specific to your site. It is free and can be downloaded.

Making PowerPoint Accessible

<http://www.tsbvi.edu/technology/powerpoint.htm>

From the Texas School for the Blind and Visually Impaired, this site gives step-by-step notes for different versions of PowerPoint, as well as other useful links.

General Information

Accessible Curricula—Good Practice for all

<http://www.techdis.ac.uk/resource.html>
Recently-published guide examining many aspects of supporting students with disability.

AWARE

<http://aware.hwg.org/>

Accessible Web Authoring Resources and Education—the site for the HTML Writers Guild, designed as a source for all Web authors for learning about Web accessibility.

usableweb.com

<http://www.usableweb.com/>

Usable Web is a collection of links about information architecture, human factors, user interface issues, and usable design specific to the World Wide Web.

Clemson University Accessibility site

<http://www.clemson.edu/accessibility/>

This site provides a collection of useful links and resources about accessibility of websites.

Websites that Work

http://boombox.ucs.ed.ac.uk/ramgen/malts/accessibility_info/websites_that_work.rm

This is a streamed version of an RNIB video illustrating how users with a variety of impairments use computers.

MALTS : 55 George Square
Tel: 650 4097
Email: malts@ed.ac.uk
<http://www.malts.ed.ac.uk/>

EUCS WebTeam
Tel: 650 6656
Email: w3hd@ed.ac.uk
Web: <http://webhelp.ucs.ed.ac.uk/>

Disability Office: 3 South College Street
Telephone/voice: 650 6828
E-mail: Disability.Office@ed.ac.uk

Learning and Resource Centre
2nd Floor main library
Telephone: 650 6684
lrc@ed.ac.uk
<http://www.asg.ed.ac.uk/lrc/>

CALL centre : Paterson's Land
Tel: 651 6235
Email: call_centre@ed.ac.uk
<http://callcentre.education.ed.ac.uk/>