

Introduction to Accessibility in E-Learning

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Introduction

This document will introduce the concept of Accessibility, recommend online resources for further reading and list some pointers to help you make your online learning areas more accessible. It is not specific to any system or software and is intended to be applicable to most online educational resources.

For a more detailed guide to making course materials accessible in WebCT see our guide "Accessibility in WebCT: Using JAWS and .pdf's".

What is Accessibility?

Accessibility is a broad term that refers to the level of access and the intention of making online resources easier to navigate and read; especially for those with disabilities that may make using a computer more difficult.

A Glossary

- The Adobe reader: The Adobe reader is a free reader (available from:) that is often used to read .pdf files.
- Assistive Technologies: Any technology, either hardware or software, that is used to aid a disabled user. Examples include Braille keyboards and screen-readers.
- Screen-readers: An assistive technology that reads the content of the screen out loud for visually impaired users. The term 'narrators' is sometimes used as well.
- Optical Character Recognition (OCR): A type of software (usually associated with a scanner) that converts an image of text into actual text that can be 'read' by software.

Pdf versus MS Office

PDF files and the Adobe reader have gained a poor reputation among Accessibility advisors and experts. Adobe have, until very recently, made little effort to check their products for use by screen-readers and assistive technologies and many screen-readers are effectively unable to read pdf files as a result. More recent versions have attempted to remedy this; including automated checks for assistive technologies on the computer being used and an in-built OCR scan.

Many visually impaired students will, however, still be using older versions of the Adobe reader and may have understandably built up a distrust of pdf as a format. We strongly recommend, where possible, that all course materials are made available as MS Word files in a zipped file. This would allow all course materials to be downloaded from one link in a readily accessible format.

A checklist

This should not be considered an exhaustive list to insure high levels of accessibility; it is certainly a good starting point however and will also improve the usability of your online area for all users.

- Carefully plan your course architecture. The online area should follow a sensible structure that is strictly adhered to.

- Carefully plan the layout of your screens. While a sighted person can quickly skim over a page and use the mouse to skip to the tenth or twentieth link; a visually impaired user will have to wait for the screen reader to make its way through the page. Keep the number of links to a minimum and prioritise the order of links.
- Recommend the latest version of the Adobe Acrobat reader to your students. Versions 7 and later have excellent assistive tools; earlier versions, as stated above, have gained a deservedly poor reputation.
- Always include a description for images. If you have the ability to include HTML; include this in the tag as a 'title' or 'alt' tag. Even if the image does not contain any important information; a visually impaired user will have to assume it does.
- Use simple and well annotated graphs to convey visual information.
- Carefully consider the relevance and importance of materials before placing them online.
- Always use Optical Character Recognition (OCR) when scanning a document. If a printed page is scanned normally the result is effectively a photograph of that page; it is not strictly text and a screen-reader is unlikely to recognise it.
- When producing .pdf files use the Adobe PDF tools; most free converters are not as reliable.
- If possible include a zipped file containing all course materials and make this available for download.
- Do not include drop-down menu's as they are difficult for many screen-readers to operate. If they are being used as a secondary navigation, make it clear to visually impaired users that they do not contain information or navigation that is not duplicated elsewhere.
- Use precise titles for links. For example; "Say it here" does not specifically denote a discussion forum. "Copyright" does not specify what type of material it is linking to; merely the theme.
- Use colours sparingly and always use a high contrast palette when placing text on a coloured background.
- Remember to consider the browser. E.g. Internet Explorer now requires an extra click to activate rich media content and blocks pop-up windows
- Only include relevant data. While it is tempting to place a link to every interesting scanned article or bookmarked website into your course area; sorting through these is very difficult and time-consuming for a visually impaired user. Consider the relevance of any materials placed online and, if they are optional, mark them as such.

Further reading

Web Accessibility Initiative (WAI): <http://www.w3.org/WAI/>

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