



RSC

Regional Support Centre
Scotland North & East

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Accessible and Inclusive e-Learning for All

A guide to ensuring your e-learning materials are accessible and inclusive.

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Introduction

The aim of this guide is to bring together examples of good practice in one succinct document to ensure your teaching and e-learning materials are accessible and inclusive for a diverse range of learning needs.

Underpinning the guide is the legislative imperatives of the Special Educational Needs and Disability Act (SENDA) 2001, and more recently the Disability Equality Duty. In each of the sections, the guide will focus on 'making reasonable adjustments' so that learning and teaching materials are accessible and inclusive for all.

JISC TechDis Accessibility Essentials

The JISC TechDis Accessibility Essentials series provides step-by-step guides on popular programs, such as Microsoft Office and file formats, such as the Adobe Portable Format (PDF). The series covers important aspects such as making electronic documents more readable to creating and delivering accessible PowerPoint presentations.

Visit the site at: <http://tinyurl.com/y54nvk>

JISC TechDis Accessibility Online Audits

How accessible is your college or university? The JISC TechDis Online Accessibility Self Evaluation tool provides advice and guidance which can impact on six key institutional roles; marketing managers, network managers, library staff, additional learning support staff, senior managers and learning technologists. For each role, the self evaluations allow staff to explore ways in which accessibility and inclusion can be integrated into mainstream teaching, learning and institutional processes.

Visit the site at: <http://www.techdis.ac.uk/getevaluated>

Quality and Equality of Learning and Teaching Materials (QELTM)

QELTM provides practical and achievable guidelines for creating and developing learning and teaching materials with particular reference to anti-discriminatory language and appropriate use of images.

Visit the site at: <http://www.sfeu.ac.uk/qeltem>

Scottish Accessible Information Forum (SAIF)

As well as providing advice and training, SAIF has published good practice guidelines and standards for both printed and electronic documents.

Visit the site at: <http://www.saifscotland.org.uk/>

AltFormat

AltFormat is a web portal which focuses on developments in the production of alternative format materials, such as large print, Braille, audio, digital talking books, etc.

Visit the site at: <http://altformat.org/>

The Plain English Campaign

The Plain English Campaign promotes the use of clear and concise information with the aim of eradicating ‘gobbledygook’, jargon and misleading public information.

Visit the site at: <http://www.plainenglish.co.uk/>

Overview

The guide is divided into 8 sections, and considers popular tools which are used to create learning and teaching materials or are used as a means of delivering information to learners, e.g., Microsoft Word, Microsoft PowerPoint, Adobe Reader and Virtual Learning Environments (VLEs). Other sections include; creating alternative formats, mobile resources and examples of good practice.

Each section will provide a brief overview in the shape of checklists, tips and hints and are accompanied with relevant internet links.

It should be noted that the development of this guide has been approached with the view that checklists and tests for usability and accessibility are not ideal ways to address the issue of how easy it may be to use on-line learning materials; a more holistic approach is needed.

Ensuring your e-learning materials are accessible and inclusive

1. Top tips for optimising accessibility in Microsoft Word

It is important to ensure that when writing a document, accessibility is taken into consideration from the outset. When creating a document, there are a number of inbuilt features which could save time and effort, for example, formatting, headings and styles, AutoText, navigation, etc.

Each of the links below provides additional information as well as a step-by-step guide.

1. Use correct/appropriate formatting, e.g., heading styles.
<http://tinyurl.com/bkrqlb>
2. Use appropriate font style, spacing, size, and alignment.
<http://tinyurl.com/8dto9d>
3. Always include appropriate descriptive image tags and labels.
<http://tinyurl.com/ak67y8>
4. Ensure hyperlinks are correctly and logically labelled.
<http://tinyurl.com/7kva8k>
5. Always insert page numbers and page breaks.
(Insert > Page numbers)
6. Encourage students to use MS Office's 'Save My Settings' feature.
(Start menu > Programs > Microsoft Office > Microsoft Office Tools > Save My Settings)
7. Avoid negative language or potentially offensive stereotypes or assumptions - use images which reflect a diverse culture.
<http://www.sfeu.ac.uk/qeltn>
8. Use plain English which is free of unnecessary colloquialisms and acronyms.
<http://www.plainenglish.co.uk>

Resources:

The RSC TechDis Formatting Toolbar can help create accessible Word documents quickly and easily: www.scottish-rscs.org.uk/Formatting_Word_Toolbar.dot

2. Top tips for optimising accessibility in Microsoft PowerPoint

This section explores how Microsoft PowerPoint can be used to support learning. With a few simple techniques it's possible to create inclusive PowerPoint slides.

Each of the links below provides additional information as well as a step-by-step guide.

1. Where possible use slide layout/templates or use Slide Master.

<http://tinyurl.com/b3xxw6>

2. Keep information concise.

<http://tinyurl.com/cndzuk>

3. Use appropriate background and font colours/size.

<http://tinyurl.com/bllym8>

4. Whenever possible use the Notes Field.

<http://tinyurl.com/djs3qr>

5. Ensure hyperlinks are correctly and logically labelled.

<http://tinyurl.com/cjdbtx>

6. Try to use screen tips.

<http://tinyurl.com/cj6h6o>

7. Consider appropriate slide transitions.

<http://tinyurl.com/c24ume>

8. Consider accessibility issues when using audio and video in slides.

<http://tinyurl.com/aghljy>

9. Avoid negative language or potentially offensive stereotypes or assumptions - use images which reflect a diverse culture.

<http://www.sfeu.ac.uk/qeltn>

10. Use plain English and free of unnecessary colloquialisms and acronyms.

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

For more in-depth information on PowerPoint presentations, visit JISC TechDis Accessibility Essentials 3 'Creating Accessible Presentations': <http://tinyurl.com/ywf4ke>

3. Top tips for optimising accessibility in Adobe Reader for PDFs

This section explores how Adobe Reader can be used to increase accessibility with Portable Format Documents (PDFs). Adobe Acrobat contains a range of features allowing learners to customise PDFs to suit their individual preferences.

Each of the links below provides additional information as well as a step-by-step guide.

1. Consider the benefits and barriers of using PDFs.
<http://tinyurl.com/dk8zl4>
2. When converting material to PDF format, ensure the original source is accessible.
<http://tinyurl.com/btpqn2>
3. Provide guidance to students about customising PDFs.
4. Provide guidance on colour preferences.
(Edit > Preferences > select Accessibility under Categories on the Preferences dialogue box > check the Custom Colour radio button (under Document Colour Options) > choose your preferred colour > select Okay)
5. Consider using the High Contrast option for learners with visual difficulties.
(Edit > Preferences > Select Accessibility under Categories on the Preferences dialogue box (under Document Colour Options) > check the High-Contrast Colours radio button (under Document Colour Options) > choose your preferred high contrast colour > select Okay)
6. Provide guidance on text-to-speech facility (Read Out Loud).
(Edit > Preferences > Select Reading under Categories on the Preferences dialogue box > check the Custom Colour radio button (under Reading Order Options) > choose your preferred voice > select Okay)
7. Use keyboard shortcuts to activate Read Out Loud (on the View menu).
(Left Shift + Control + Y)
8. Provide guidance on auto-scroll (on the View menu).
(Keyboard shortcuts: Shift + Control + F)

For more in-depth information on PDFs visit JISC TechDis Accessibility Essentials 4 ‘Making the Most of PDFs’: <http://tinyurl.com/5b7epv>

4. Top tips for optimising accessibility on your college/university website, intranet and Virtual Learning Environment (VLE)

There are a number of issues to consider in relation to your college/university website, intranet and VLE. Your institution must ensure they comply with the standards of the World Wide Consortium (W3): <http://www.w3.org/> and the World Accessibility Initiative (WAI): <http://www.w3.org/WAI/>

The Scottish Accessible Information Forum provides valuable information on general web accessibility: <http://tinyurl.com/aop2h6>

JISC TechDis provide specific advice on web accessibility and good practice to ensure your institution's website is accessible to all learners: <http://tinyurl.com/bpj8e7>

General Principles and good practice

There are some basic principles which apply to your college/university website, intranet and VLE.

1. Must confirm to W3C/WAI standards.
2. Provide an accessibility statement. The BBC website provides a useful starting point: <http://www.bbc.co.uk/accessibility/> Ensure that your learners can make adjustments to meet their personal needs. It is recommended that you provide guidance on customisation, e.g., colour, font style, size etc. The JISC RSC Access and Inclusion Blog offers a range of tutorials and resources (custom style sheets), in particular customising the Internet Explorer browser: <http://www.scottish-rscs.org.uk/access/> (under the Resources tab and browse for the heading: Customising Internet Explorer for you and your learners.
3. Test your institution's website and VLE with accessible technologies, for example screen readers, voice recognition, and switch access. Video tutorials can be viewed on the JISC RSC Access and Inclusion blog: <http://www.scottish-rscs.org.uk/access/> (under the Web Access tab).
4. Consider captions for multimedia applications. Examples of captioning are also available to view on the JISC RSC Access and Inclusion blog: <http://www.scottish-rscs.org.uk/access/> (under the Web Access tab).

Web 2.0 and Web²Access

Web 2.0 offers a wide range of new and developing services to engage and communicate with staff, students and new audiences. These technologies are diverse and are reshaping user engagement.

To ensure Web 2.0 is accessible to a wide range of users, JISC TechDis have developed Web²Access, a resource to support web and learning content developers and those who make decisions about the implementation and use of Web 2.0 teaching and learning tools. Web²Access provides an easy-to-use set of checklists to ensure that accessibility is incorporated into all aspects of Web 2.0.

To visit the Web²Access site go to: <http://web2access.org.uk/>

To run an accessibility test of your institution's website go to:

<http://web2access.org.uk/test>

JISC TechDis provides Online Accessibility Self Evaluations for technologists and learning content developers: www.techdis.ac.uk/getevaluated

5. Creating alternative formats for your learning and teaching materials

With the impact of the Disability Equality Duty (DED) and subsequent requirement of colleges/universities to publish their Disability Schemes, institutions are now under an obligation to ensure teaching and learning materials are available in accessible and alternative formats. This means that files, such as Word docs, PowerPoint slides, PDFs, etc. should be created with suitable styles and headings and whenever possible, be available in alternative formats such as large print, audio, Braille and if possible, DAISY, sometimes known as digital talking book format.

Resources

Dolphin Easy Converter converts Word, PDFs and scanned documents to Braille, DAISY, large print, MP3 and text: <http://tinyurl.com/cublzo>

Dance with shadows

This site acts as a portal to 6 free online conversion tools:

<http://www.dancewithshadows.com/tech/text-to-speech.asp>

RoboBraille

RoboBraille is a European funded project for converting Word document to MP3 format and Braille: <http://tiny.cc/RobboBraille>

Read The Words

Text-to-speech resource with good synthetic voices: <http://readthewords.com/>

JISC TechDis Publisher Lookup UK

A collaborative facility organised by JISC TechDis and The Publishers Association, the purpose of the website is to enable educationalists working with disabled learners to get electronic versions of published texts: <http://www.publisherlookup.org.uk/>

AltCollections

This site is designed for teaching staff seeking to source electronic resources in alternative formats, such as large print, audio (MP3), DAISY and/or Digital Talking Books (DTB). AltCollections contains a range of learning and teaching resources such as curriculum support packs at NQ and HNC level: <http://www.rsc-ne-scotland.org.uk/altcollection/>

6. Accessible Networks

A further issue to consider is the accessibility of your institution's network. For example:

1. Consider how users with motor difficulties login to the network. Not all students are able to press and hold the 'Ctrl + Alt + Delete' keys simultaneously.
(Is there an alternative method of input, for example an on-screen keyboard which appears with the login screen?)
2. Provide users with a roaming profile that is flexible and meets their individual needs.
3. Ensure the network does not interfere or impede the features of assistive technologies, e.g., text-to-speech, magnification, etc.
4. If and when Mac and PCs are available ensure there are comparable assistive technologies available for both operating systems.
5. If the institution provides a virtual private network (VPN) consider the accessibility of the user interface.

JISC TechDis provides Online Accessibility Self Evaluations for Network Managers:

www.techdis.ac.uk/getevaluated

7. Mobile Technologies

For learners with additional access needs, mobile devices can provide a substantial support mechanism either by providing an 'any time, any place' assistive technology or by allowing learning to take place in ways more suited to the learner's needs. Mobile devices are not a universal answer to accessibility issues and indeed some aspects of some devices will be inaccessible for some users, but this is a rapidly evolving area where the willingness to experiment can have rich rewards and surprising benefits.

JISC TechDis provide a wealth of information on mobile technologies and m-learning issues related to accessibility: <http://tinyurl.com/bac4c>

8. JISC TechDis RSC Accessibility Accredited Courses

The RSC Scotland North and East provide a range of JISC TechDis accredited accessibility modules. The modules are designed to ensure staff can enhance skills and knowledge in a range of accessible and inclusive e-learning areas.

The modules include:

- Making reasonable adjustments.
- Using ICT to support learners with dyslexia (literacy difficulties).
- Introduction to voice recognition.
- Using ICT to support learners with a visual impairment.
- Creating accessible documents and alternative formats.

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