Introduction

In order to comply with the Equality Act (2010), eLearning materials need to be accessible to disabled students. MyAberdeen uses the Blackboard Learn 9.1 environment, which has won awards for its accessibility. However, a MyAberdeen course can only be as accessible as the content uploaded into it.

Blackboard Ally

Blackboard Ally improves the accessibility of text documents on MyAberdeen. Ally checks for accessibility problems in MyAberdeen content and helps staff resolve these by following simple steps. Students gain the advantage of accessing content in several, accessible, formats. Go to our MyAberdeen:Staff Toolkit page and watch the video ‘Blackboard Ally for Content Creators’. When you click on the gauge icon next to a document on MyAberdeen, Ally will provide advice on how to improve a document’s accessibility. Further general advice is available below.

MyAberdeen accessibility advice

Course Menu Links

Any course menu links (on the left-hand side of the MyAberdeen home page) that are not deemed necessary for your students should be hidden. This will reduce the number of links a screen reader (such as JAWS) will announce. By default, links that contain no content will be hidden to students and screen readers.

Images on MyAberdeen

Think carefully about adding alternative text to images added to MyAberdeen pages. If images are added via the text editor, you will be prompted for an Alt tag. If this is left blank, the image by default will have two double quotation marks (“”) as alternative text, which means that a screen reader will ignore the image: this is ideal if the image is purely decorative. If the image contains text, is of importance or adds value to the learning, Alt text needs to be added. For helpful advice, see WebAim’s article on the Appropriate Use of Alternative Text. For more advice on using images in general, please see below.

MyAberdeen Quiz Tool

In theory, all question types, apart from Hotspot questions, are accessible. Questions that incorporate combo-boxes (dropdown boxes) can be almost impossible to access for JAWS users. In Jumbled Sentence questions, if there are numerous combo-boxes in one sentence, it can be very difficult to understand which box relates to which part of the text. Screen reader users may find a Word or Questionmark Perception version easier to navigate and use. For further advice, contact elearning@abdn.ac.uk.

MyAberdeen Discussion forums, Wikis and Chat tools

Ensure that all Discussion Forums and Wikis are identified as Discussion forums or Wikis within their title text, so that JAWS users can recognise which links they need to select. Although the Blackboard Learn 9.1 Live Chat tool is, in theory, accessible, it is so difficult to use with JAWS that it would be unfair to assess students for their contribution to live chat if they need to use Assistive Technology.
General eLearning content accessibility and usability advice

For text-based documents use the clearest and simplest language appropriate for the course content. Snigdha, writing for 'Web and Design', provides some good tips in [20 ways to improve Web site readability](https://webaim.org/techniques/readability/).

One of the most effective ways to check for clear, concise writing is to have your text read back to you, either by a colleague or by assistive technology – such as the [NVDA open source screen reader](https://nvwa.org/). Mac, i-phone and i-pad users can use [VoiceOver](https://en.wikipedia.org/wiki/VoiceOver_(Macintosh)).

Although conventional wisdom states that sans-serif fonts are more suitable for online use, [WebAim’s Fonts article](https://webaim.org/techniques/fonts/) states that most modern computer screens are capable of rendering serif fonts with equal clarity. Fonts such as Verdana, Tahoma, Trebuchet MS, and Georgia were developed specifically for electronic media, and are now common on both Windows and Mac platforms.

For readability, it is usually best to:

- Use left-aligned text – for some users with Dyslexia justified text, with its uneven spacing between words, can cause 'rivers' of white space to run down the page, making reading almost impossible
- Avoid blocks of italics and underlined text – this can create readability problems, especially for people with some forms of Dyslexia and visual impairments
- Avoid placing text directly onto a patterned background, and if using coloured backgrounds use [WebAim’s Color Contrast Checker](https://webaim.org/resources/contrastchecker/) to ensure that sufficient contrast exists between the text and the background.

**MS Word**

Two of the most important accessibility features in Word are Styles and Alt tags for images.

- Using Styles gives a document structure. When Styles have been used, a screen reader will announce, and list, headings in a hierarchy, enabling users to visualise the structure of a document and navigate to points of interest. Styles can also help with the automated creation of a table of contents for longer documents.
- Alt tags provide text equivalents for images to screen readers. To add Alt Text in Word 2016, right-click on the image and select ‘Edit Alt Text’. This will open a pane at the right of the screen, which will allow you to insert the appropriate Alt Text. To add Alt Text in Word 2013, right-click on the image, select Format Picture, select the Layout and Properties icon and choose Alt Text. Enter the appropriate alternative text in the Description field, NOT the Title field – see WebAim’s Adding Alternative Text advice. For instructions for creating headings and Alt tags in all current versions of Word see WebAim’s article [Microsoft Word: Creating Accessible Documents](https://webaim.org/techniques/word/).

**MS PowerPoint**

In addition to using appropriate font sizes, colours and sensible slide transitions, the most important accessibility advice for PowerPoint is the appropriate use of Styles and Alt tags.

- Avoid putting .pps files online; these cannot be processed by accessibility software.
- PowerPoint for Mac still has accessibility issues, so include an accessible PDF version to ensure inclusivity for all students. Currently, this is only possible using Acrobat Pro.
- Using any of the inbuilt slide layouts will ensure Styles are used appropriately.
- Give each slide a unique title, as it makes understanding the structure of the presentation easier for someone reliant on a screen reader software (which will read out the slide titles).
- If you are using PowerPoint 2016, to add Alt Text to an image, right-click on the image and select ‘Edit Alt Text’. The Alt text pane will appear at the right of the screen.
- To add Alt tags in older versions of PowerPoint right click on the image, select Format Picture, select the Layout and Properties icon and choose Alt Text. Enter the appropriate alternative text in the Description field.
• Do an accessibility check.
• For more detailed advice, take a look at WebAim’s article on PowerPoint Accessibility.

PDFs
• At the time of writing, the only way to create accessible PDFs from existing documents is to use MS Office or Adobe Acrobat Pro DC. Before converting the document to PDF ensure that Styles and Alt tags have been used. Adobe Acrobat DC is available from the Software Centre on networked PCs.
• When scanning documents to PDF on a University MFD scanner/copier, the document gets rendered as an image and not as text unless you do Optical Character Recognition (OCR). E-mail the document as a PDF to yourself from the MFD, open the document in Acrobat DC (available on Networked PCs from All Apps > Microsoft System Centre > Software Centre). Under ‘Tools’ open ‘Edit PDF’ and this will automatically do Optical Character Recognition (OCR) for you. Once it’s completed the task, save the document with a memorable name. All scanned documents should be proofread prior to publishing.
• Adobe Acrobat Pro/DC includes a ‘Read Aloud’ feature, within the View menu, that can be useful for checking that the OCR has worked correctly. Go to the View Menu > Read Out Loud > Activate Read Out Loud. You then need to go back to the View Menu, reselect Read Out Loud > Read This Page Only.
• Acrobat DC has an Accessibility Checker within the Tools menu. This is useful for checking issues such as Alt Text. Always select ‘Full Report’. The reports generated give practical advice on fixing the highlighted problems.
• For further information on producing accessible PDFs see WebAim’s article on PDF Accessibility.

Audio and Video
Audio and video can add significantly to the effectiveness of a learning resource. However, there may be accessibility issues with these if they are the only way of presenting information.

Video Captioning
WebAim provides a useful web captioning overview. For accessibility purposes, all videos should have closed captions, or have transcripts associated with them. Many users prefer captioned videos, as it is not always possible or practical to use sound. Audio descriptions will help where intonation and key information is only available through sound. For further advice, see Joe Clarke’s Standard techniques in audio description. JISC Legal Lecture Capture Guidelines advises on all legal aspects of lecture capture using video and includes accessibility guidelines. Both Panopto and Youtube allow you to add closed captions, both manually and automatically, and edit them for videos hosted on their respective platforms. For automatic captions to be effective, the audio quality needs to be good enough. For more information, please read the guide on How to add captions on Panopto recordings or contact elearning@abdn.ac.uk.

Audio and Podcasts
Audio files and podcasts can make excellent eLearning content, especially for students with Dyslexia. JISC TechDis provide an excellent Audio advice and guidance sheet and provide useful information in their Podcasting and Accessibility article. Audio feedback can also be a useful tool for many students.

Images
When using images, it is important to keep in mind both accessibility guidelines and copyright legislation. This is in order to comply with the Equality Act (2010), as well as with the Copyright, Designs and Patents Act, 1988 (c.48) (CDPA). This includes both when uploading images directly to MyAberdeen, and when adding them to PowerPoint presentations, Word documents, etc.

Depending on the type of disability, learning difficulty or preferred learning style, images can be very useful for enhancing comprehension. However, there are a number of things to keep in mind:

• Do not use only colour to convey meaning, as this will make images hard to understand for people with colour-blindness and low vision, as well as if the images are printed out in black and white.
• If there is text within the image, make sure that there is sufficient contrast between the text and the background, to improve readability.

• Provide alternative text for images, especially if the image contains text, or is important to the learning experience and understanding of the subject matter.

• If the images are quite complex, it might be worth adding an explanation either as a caption (right-click on the image and select “Insert Caption”) or in the main body of the text.

Please visit WebAim’s Accessible Images article for further useful advice on accessibility.

For more information on copyright, please check the Library resources on Finding Copyright Cleared Images.