

Quick Guide – Creating accessible elearning content

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Introduction

In order to comply with the [Equality Act \(2010\)](#) and the [Public Sector Bodies \(Websites and Mobile Applications\) \(No. 2\) Accessibility Regulations 2018](#), eLearning materials need to be accessible to everyone, including disabled students. [Blackboard](#) (Anthology) is committed to making their virtual learning environments as accessible as possible, see [Accessibility in Blackboard Learn](#). A MyAberdeen course can, however, only be as accessible as the content uploaded into it.

Anthology

[Anthology Ally](#) provides guidance and tips for improving the accessibility of your content. Ally checks for accessibility problems in files and images uploaded to MyAberdeen and provides staff with help to resolve any issues found. Students gain the advantage of accessing accessible content via [alternative formats](#). The checks that Ally makes are essential, but there is more to accessibility than Alt Text and Heading Styles, see below:

MyAberdeen accessibility advice

Course design and course menu links

Ensure that your course materials are present in a clear, logical structure with descriptive titles. In Original courses, in order to reduce the number of links a screen reader (such as JAWS) will announce in the left-hand pane of the MyAberdeen page, delete or hide any not deemed necessary for your students.

Text on MyAberdeen

Anthology Ally evaluates the accessibility of files, images uploaded to MyAberdeen and documents created using the WYSIWIG editor. Use the built-in heading styles in the text editor to ensure text is formatted in an accessible way.

Images on MyAberdeen

When images are added via the text editor to MyAberdeen, you will be prompted to add alternative text (or image description). If this is left blank, you may see the red Ally indicator point out that the image is not accessible. If the image contains text, is of importance or adds value to the learning, Alt text needs to be added. Images that are only for visual effect and do not contain information relevant to the learning content can be marked as decorative, see [Add Image Descriptions](#).

MyAberdeen Test Tool

All question types available in Ultra are deemed to be accessible. Blackboard have a useful article on [Using Tests with JAWS](#) (screen reader) and on [Navigating Matching Questions with Assistive Technology](#), which can prove quite complex. It would be highly beneficial to give screen reader users access to a practice test first so as they can get to grips with how to answer various question

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types in a non-critical environment using keyboard commands and highlight any problems they might encounter. For further advice, contact elarning@abdn.ac.uk.

General eLearning content accessibility and usability advice

Use clear and simple language

For text-based documents use the clearest and simplest language appropriate for the course content. Dave Child, writing for '[The Readable Blog](#)', provides some good tips in [7 strategies to simplify your writing and improve readability](#). One of the most effective ways to check for clear, concise writing is to have your text read back to you using the [Read Aloud](#) function in Office 365. Mac and iPhone users can use [VoiceOver](#).

Readable fonts

Consider using sans serif fonts such as Arial, Verdana, Tahoma, Calibri or Open Sans and font size of at least 12 point, as some users with dyslexia may find these fonts easier to read. Using MS Word files or other formats, which allow the user to modify the font, size and colour of text to suit their preferences, is recommended. See [WebAim's Typefaces and Fonts](#) article for more information.

Improve readability

- 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.
- Do not use only colour to convey meaning – for example: “correct statements are highlighted with green and incorrect statements with red”. This will make images hard to understand for people with colour-blindness and low vision, as well as for anyone printing the page 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. You can use WebAim's [Color Contrast Checker](#).
- Set the [document language for Word](#) and [PDF documents](#), so that a screen reader knows which language to use.

MS Word

Two of the most important accessibility features in Word are styles and alt text for images.

- Using heading styles gives a document structure. The University has a [Word template](#) which includes Styles. 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.

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- Alt text provides text equivalents of images for screen readers. To add Alt Text in Word for Office 365, 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.
- Use tables for presenting data, not for page layout. Identify a header row to make the table easier to read for screen readers.
- Use MS Office's [Accessibility Checker](#) to look for any accessibility issues.
- The University of Aberdeen guide on [Writing Accessible Documents](#) will help you. MS Office support also have a resource for [making your Word documents accessible to people with disabilities](#). You can download an [Accessible Word template](#) containing University branding

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 text. The University has an accessible online [template for PowerPoint](#).

- Only upload presentation files (.ppt and .pptx) .pps / .ppsx files cannot be processed by accessibility software.
- Using the [inbuilt slide layouts](#) will ensure Styles are used appropriately.
- [Give each slide a unique title](#), as it gives structure of the presentation to screen reader software (which will read out the slide titles).
- [To add Alt Text in PowerPoint for Office 365](#), right-click on the image and select 'Edit Alt Text'. The Alt text pane will appear at the right of the screen.
- Do an [accessibility check](#).
- For more detailed advice, see the MS Office support resource on [Making your PowerPoint presentations accessible to people with disabilities](#).

PDFs

The easiest way to create an accessible PDF is to create an accessible document in MS Word, using Styles and Alt text, and then [convert the Word document to a PDF](#). Adobe Acrobat is available on request from the [Servicedesk](#).

- Whenever possible do not use scanned documents, use pre-prepared e-documents. 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) via the Recognise Text option in Adobe Acrobat, see [How to Create PDFs from Text and images](#) Adobe Acrobat includes a Read Aloud feature, within the View menu, which can be useful for checking that the OCR has worked correctly
- Acrobat Pro has an [Accessibility Checker](#) within the Tools menu. Always select 'Full Report'. The reports generated give practical advice on fixing the highlighted problems.

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- 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. [Audio and video must be accessible](#). This means you should add accurate captions for videos with speech, audio description for visual aids (where these are not described verbally) or a full transcript of the same content. Toolkit Panopto resources includes advice on [auto-captioning Panopto videos](#). If it is not feasible to caption all of your audio and video content immediately, prioritise content in courses where accessibility improvements will have the biggest impact. Adding captions not only benefits students with disabilities, it can benefit those who can't use audio in certain situations.

When creating audio and video content, one of the biggest accessibility issues affecting all users are recordings with poor audio quality. Here are four tips to make the audio quality of your recordings better:

- Record in a location where you can eliminate background noise (e.g. people talking, construction noise, traffic, hum from air conditioning, etc.).
- Use an external microphone and make sure the microphone is close to you (e.g. use the clip-on mic in a lecture theatre).
- Review your recording for audio quality before publishing to students.
- consider booking one of the [video booths](#) to create your recordings.

Images

When using images, it is important to keep in mind both accessibility guidelines and copyright legislation, 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:

- [Provide alternative text \(Alt Text\)](#) for images, especially if the image contains text or is important to the learning experience and understanding of the subject matter. This is essential for students using screen readers.
- If the images are quite complex, add an explanation either as a caption (right-click on the image and select "Insert Caption") or in the main body of the text. The Diagram Centre's free [POET Training Tool](#) can help with writing effective image descriptions.
- See WebAim's [Accessible Images](#) article for further useful advice on images and accessibility.
- For more information on copyright, please check the Library resources on [Free to use Images and music](#).

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Rich media

When incorporating any interactive multimedia materials to your course, keep in mind that these materials should enrich the learning experience for all students. Providing alternative versions of content, e.g. including a text or HTML 5 version of an interactive SCORM package, allows all students to access the materials.

Conclusion

Online materials can meet all accessibility requirements but still be difficult and frustrating to use due to poor usability. Follow Course Design Guidelines and wherever possible, conduct usability testing by getting representative users, i.e. students, to evaluate and provide feedback on the usability and accessibility of your courses. You could also contact eLearning to enquire about their Course Accessibility Service.

Further Resources

Supporting users

- eLearning's Accessibility of Digital Learning Materials
- eLearning's Course Design Guidelines
- WebAIM - Making Web Content Accessible to People with Cognitive Disabilities
- Lisa Herrod – Deafness and the User Experience
- Funkify Chrome Extension helps you experience the web and interfaces through the eyes of users with different abilities and disabilities.
- Check the readability of your piece of writing with the Hemingway Editor.

Accessibility advice – specific tools

- Class Collaborate Accessibility
- Blackboard Learn Accessibility
- Make your Excel documents accessible to people with disabilities
- Make Your PowerPoint Presentations accessible to people with disabilities
- Useful examples of how to describe images - POET Training tool

Further accessibility guidance

- Deque – Accessibility Best Practices blog posts
- Toolkit: Accessibility for Authors / Creators