



Accessibility guide for Canvas courses

RMIT Studios



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Context

This guide will help you make your Canvas course adhere to the [Web Content Accessibility Guidelines \(WCAG\)](#).

Under the Disability Discrimination Act 1992 and Disability Standards for Education 2005, RMIT is required to provide information, services and course materials that are accessible to the widest possible audience.

The [RMIT Digital Accessibility Framework](#) outlines the objectives, principles and standards to ensure the accessibility of digital resources produced or used at RMIT. This includes Canvas.

The following guide outlines the key areas of course content to consider in your Canvas environment and steps you can take to ensure your content is accessible.

Throughout this guide you will see reference numbers near each element which links to the original WCAG reference standards.

Titles, headings, paragraph & font

To facilitate legibility, typefaces need to be clean and simple so that reading is not hindered by overly complicated or decorative fonts.

Use of headings, short paragraphs and lists (bullets or numbered) should be made in order to chunk content into logical sections that follow an information hierarchy. Appropriately using html heading and paragraph tags makes it possible for accessibility screen readers to recognise and skim through content in logical order.

Hierarchy of information facilitates learning and guides the user through the structured content.

Please use the default typography settings implemented in your Canvas environment and try to avoid adjusting or replacing them.

Page titles

When naming page titles ensure that they are short and accurately describe the content to follow in the page. Ensure the page title is unique and not similar to other page titles. For pages that are part of a multi-step process — include the step in the title. This helps users to:

- quickly and easily identify if the page is relevant to their needs
- help people with visual disabilities to differentiate content when multiple web pages are open
- help people with cognitive disabilities, memory issues and reading disabilities identify content of page.

(WCAG [2.4.2](#))

Headings

WCAG recommends that headings:

- need a hierarchy scale — they should show hierarchy — achieved through correct mark-up language (heading tags) where the tags descend in order of importance from H1 to H6 accordingly
- have logical hierarchical order to convey appropriate information both for viewer and screen reader software ordering (i.e. appropriate html mark-up)
- should **not** use colour as the only method of differentiation in hierarchy
- must accurately describe the content of the heading and associated or corresponding paragraph
- have 1.5 line spacing or greater for each heading size.

(WCAG [1.3.1](#), [1.3.4](#), [1.4.12](#), [2.4.6](#), [2.4.10](#))

Paragraphs

Paragraphs should:

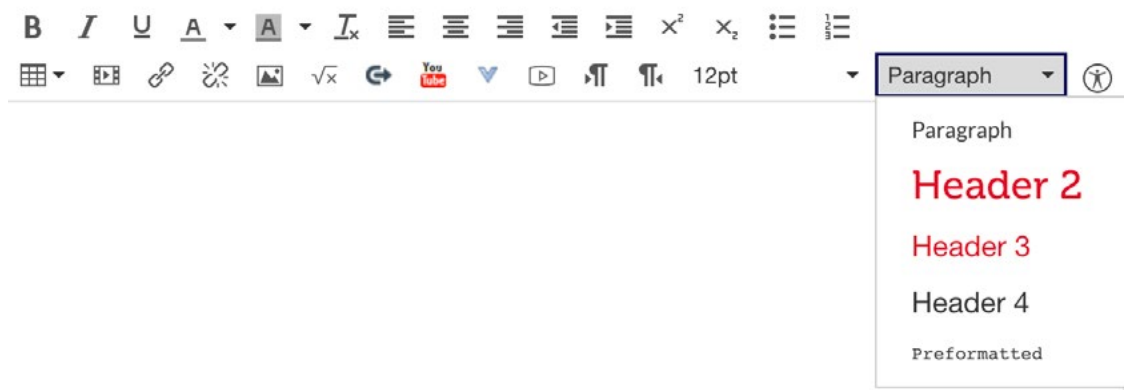
- be left or right aligned (not justified) as some people have difficulty reading justified text
- have a line height (line spacing) to be at least 1.5 times the font size
- have spacing following paragraphs to at least 2 times the font size
- have letter spacing (tracking) to be at least 0.12 times the font size
- have word spacing to be at least 0.16 times the font size.
(WCAG [1.4.8](#) , [1.4.12](#))

Font

To assist legibility for students with a visual impairment or students with learning difficulties:

- the typeface used must be simple, clear and thick enough to have a strong contrast between the font and the background
- text must have appropriate Heading and Paragraph tags (hierarchy for screen readers)
- text is able to be resized up to 200 percent without assistive technology. The resizing must not result in loss of content or functionality. This excludes captions and/or images of text.
(WCAG [1.4.3](#) , [1.4.4](#) , [1.4.8](#))

NOTE: You can find font tags (paragraph, h1, h2, h3 etc) in your rich content editor when editing a page.



Banners

- Text on banners should be selectable in order for screen readers to detect and translate. If this is not possible then banners should have appropriate [alt text applied to the image](#).
- Course banners should be responsive to fill the width of the content section in Canvas courses. This ensures legibility and flexibility with browser sizes and platforms.
- Banner titles must correctly describe the course or topic and purpose of the page
- Colours in banners must pass accessibility standards (see next section).
(WCAG [1.1.1](#) , [1.4.3](#) , [1.4.6](#))

Colour

Colour use

Colour should not be used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element:

- Colours and colour combinations must meet standards with appropriate level of contrast and hue in order for the user to be able to sufficiently read the information. (WCAG [1.4.3](#) , [1.4.6](#))
- The visual presentation of text and images of text has a contrast ratio of at least [4.5.1](#) [using the WebAIM contrast tool](#).

Colour pallet

The colour pallet should reflect the RMIT branding colours where possible. We have reduced the colour pallet to only include accessible combinations (see the colour combination guide in the next section).

If using other colours/colour pallets to those specified in the combination guide in your course content ensure they pass accessibility by testing the colours via approved accessibility tools (see resources section).

Colour combinations

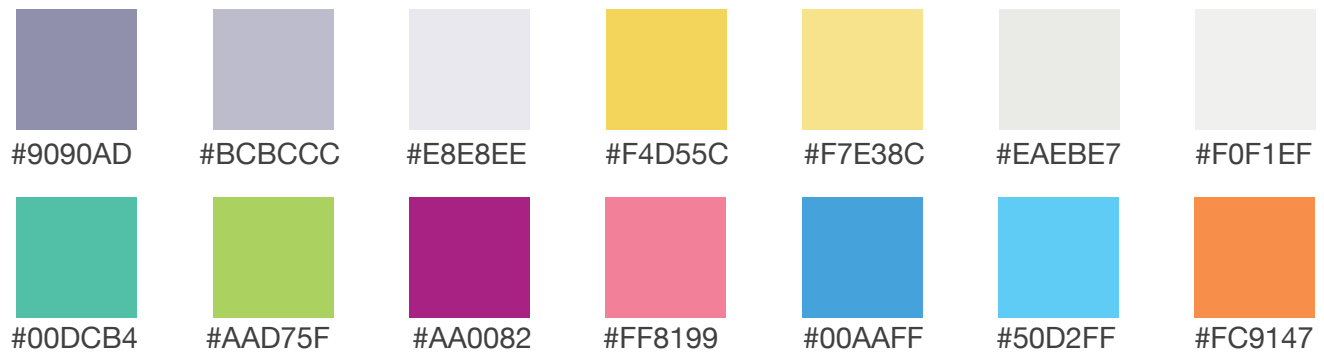
The Colour combinations below are [tested colour combinations](#) which meet accessibility standards.

The visual presentation of the following have a contrast ratio of at least 4.5:1 against adjacent colour(s). (WCAG [1.4.3](#))

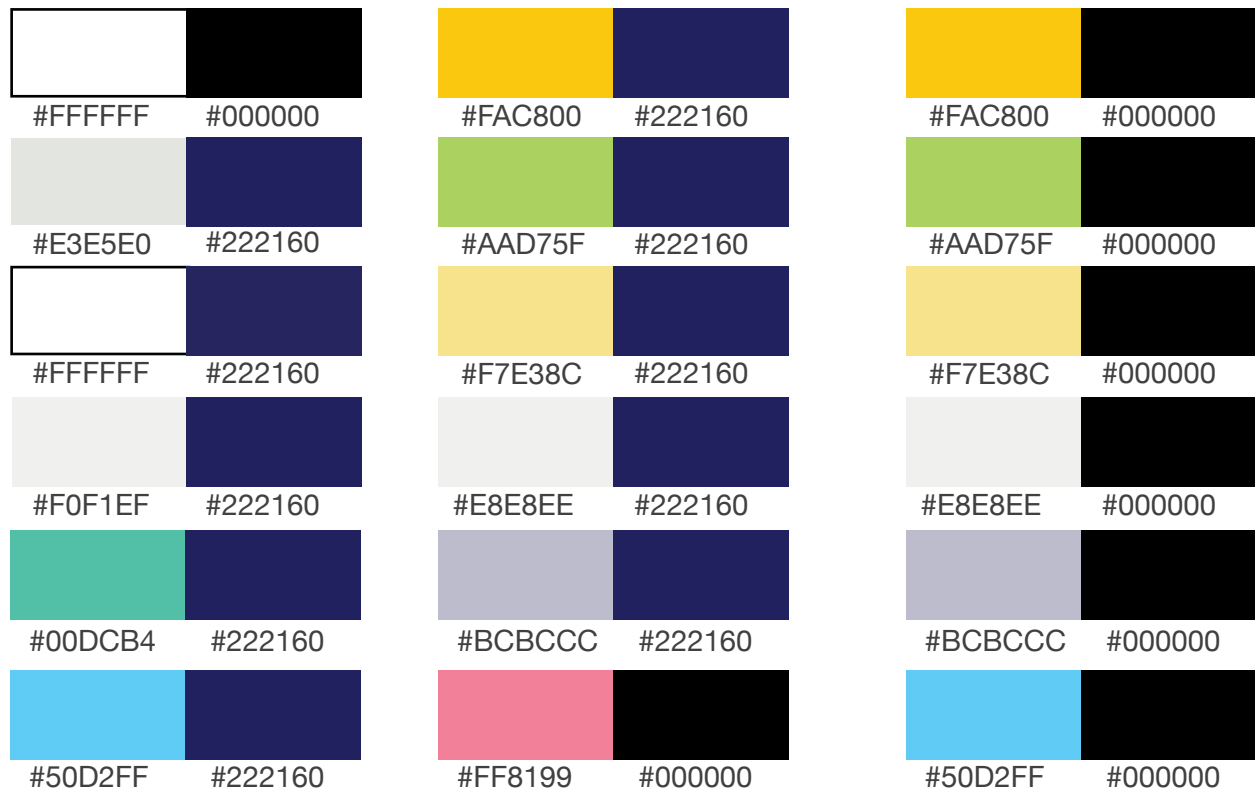
RMIT colour pallet



Additional Colours



Accessible colour combinations (AAA rating)



Images, diagrams and charts

Images, graphics, charts and diagrams that contain vital information need to have descriptive text explaining the content in detail so that information is not missed by users with visual impairment. (WCAG [1.1.1](#))

Decorative images

Images that are **decorative** should be marked as decorative so that assistive technologies ignore them when translating content. A decorative image is an image that has no impact on the user's understanding of the content or information on a page. (WCAG [1.1.1](#))

To mark an image as decorative. Select the image when editing your Canvas page and tick the decorative image box in the attributes section.

Insert/edit image ×

Image source


URL Canvas Flickr

<https://rmit.instructure.com/files/3305237/>

Attributes

Alt text

Describe the image to improve accessibility

Decorative image 

Indicates the image is for decorative purposes only and should not be read by screen readers

Dimensions x

Aspect ratio will be preserved

Essential images

Images that **contain vital and complex information** must contain a two-part alternative:

- a short caption which describes the content
- a description in the html alternative text of detailed information explaining the content displayed in the image

(WCAG [1.1.1](#))

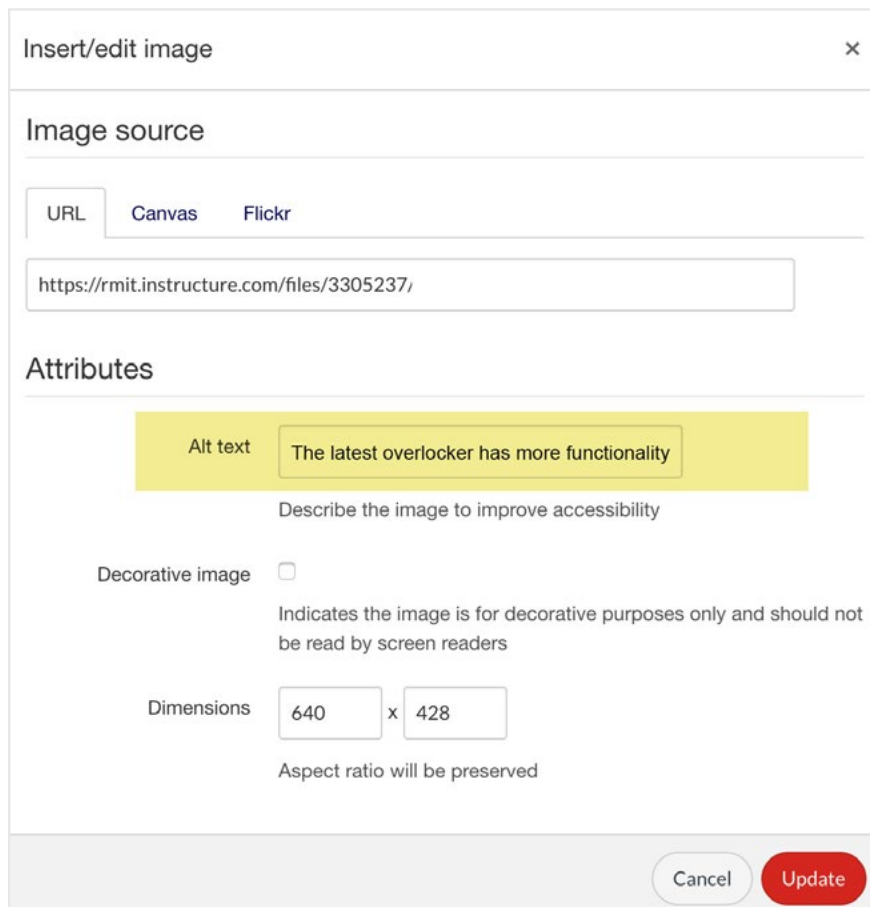
Diagrams / charts / illustrations / maps

Diagrams, graphs, charts, illustrations and maps should contain a two-part alternative:

- a caption underneath which describes the content
- a description in the html alternative text of detailed information explaining the content displayed in the image

Colours used in the diagram / chart/ image / map should [pass colour contrast testing](#).

The information displayed in the graphic will need to be described accurately so that the content and meaning is not missed by students with a visual impairment. This is captured in the html alt text field. If the descriptive text does not fit in the alt text field, then [a link to a detailed text description](#) should be provided adjacent to the image.



The image shows a dialog box titled "Insert/edit image" with a close button (x) in the top right corner. The dialog is divided into several sections:

- Image source:** Contains three tabs: "URL", "Canvas", and "Flickr". The "URL" tab is selected. Below the tabs is a text input field containing the URL "https://rmit.instructure.com/files/3305237/".
- Attributes:** This section contains several options:
 - Alt text:** A text input field with the value "The latest overlocker has more functionality". Below it is the text "Describe the image to improve accessibility".
 - Decorative image:** A checkbox that is currently unchecked. Below it is the text "Indicates the image is for decorative purposes only and should not be read by screen readers".
 - Dimensions:** Two text input fields containing "640" and "428", separated by an "x". Below them is the text "Aspect ratio will be preserved".

At the bottom of the dialog, there are two buttons: "Cancel" and "Update".

Icons

The primary purpose of icons is to attract user's attention to a particular element or section on the page. Icons are used to communicate information and ideas quickly.

Icons can provide a short cut to information using a visual language of familiar pictograms and graphics. Icons should:

- contain descriptive alt text similar to images
- contain a title/label alongside the icon
- be a consistent style throughout the course content (size, design, colour)
- icons should pass [colour contrast testing](#)

Issues and complications

The 'language' of icons is far from universal. The use of icons can be problematic as not everyone agrees on what each icon represents. They can sometimes be confusing when they are used for different purposes and contexts. Cultural groups and industries may use icons to represent information particular to them. A user's experience of an icon is based on past experience.

It should also be noted that users can only remember the meaning of a small number of icons. They are more than likely to remember the position of an icon over the meaning.

Consequently, icons should be used minimally with cultural diversity a primary consideration. Icons should not appear in isolation without text to support and/or describe what the icon represents.

Tables

When creating tables in Canvas it is important to use the Canvas Rich Content Editor.

If not correctly created tables can cause confusion with screen readers and/or accessibility tools.

To meet accessibility standards, tables need to:

- have correct html mark-up
- be left aligned (preferable)
- have colours that meet accessibility standards
- be responsive and work on hand held devices.
(WCAG [1.3.1](#) , [H51](#))

Buttons & hyperlinks

Buttons and hyperlink must:

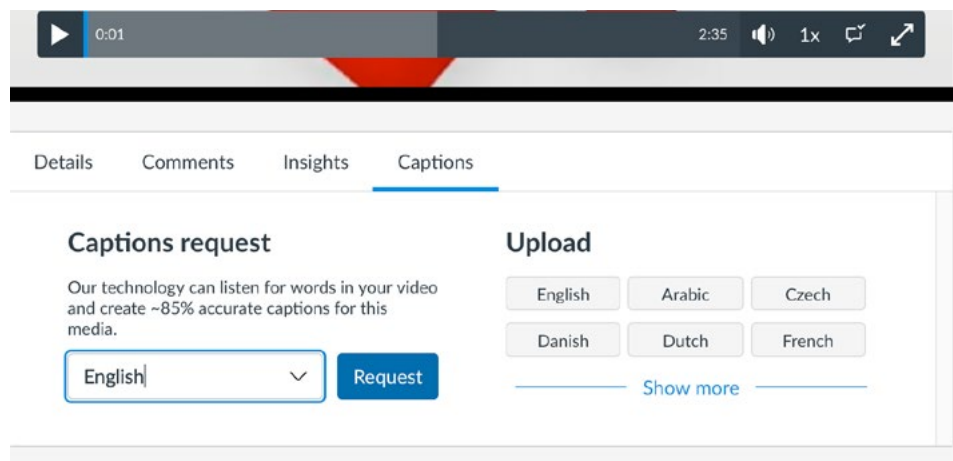
- accurately describe the purpose and/or content of the button/link
- never use ambiguous words or phrases such as 'click here', 'read more', 'this'
- look and behave consistently throughout the entirety of the Canvas course (the button/hyperlink must remain consistent in appearance so user can recognise the purpose)
- support input triggered actions when pressed or clicked (i.e. the user must know that there is an interaction with particular consequence/ reaction).
(WCAG [1.1.1](#) , [2.4.4](#) , [2.4.9](#) , [H30](#))

Video, audio and time based media

WCAG guidelines recommend that for time based media you should:

- provide captions as a text alternative to video and audio presented (for students with a hearing impairment, students from non-English speaking backgrounds, and students with learning difficulties)
- provide a transcript of the words spoken (for students with a hearing impairment)
- provide audio descriptions of all essential content presented in the media file that is vital to the understanding of the content (for students with a visual impairment)
(WCAG [1.2.1–1.2.9](#))

When adding video, audio, and time-based media files to your Canvas course it is important to add captions to your files. Canvas Studio has caption functionality. Once you upload your video or audio file you can select it, and request captioning. This will take a short while (under 2hrs) to be completed. You should review the returned captions, edit any errors, and then publish the captions.



Captions, transcripts and audio descriptions - what is the difference?

Captions are text wording that matches what the audio is saying in the video/time-based media usually contained within (overlaid) the digital media. Captions are useful to users who have hearing difficulties but also for users that have difficulty understanding the language spoken in the video/time base media. Captions are also useful if the user is viewing the content in a noisy environment or needs to have the sound off due to noise restrictions. ‘Closed captions’ are captions that can be turned on and off by the user. ‘Open captions’ are always visible.

Audio description is narration or detailed additional information included to describe important visual details that is vital to understanding the content. Audio descriptions are useful to people with visual impairment. If the media content is developed with accessibility in mind, then audio descriptions are often not necessary. This is because visual elements are considered and scripted for in the production phase and should be accurately described in the speakers’ audio.

A Transcript is a text alternative to the audio content presented in the time-based media usually in the form of a downloadable and/or selectable text file. Transcripts should contain additional descriptions, explanations, or comments that assist the user in understanding the content completely. For example, a description of gestures made, on screen actions, or visual effects. “Transcripts allow deaf/blind users to get content through the use of refreshable Braille and other devices. For most web video, both captions and a text transcript should be provided. For content that is audio only, a transcript will usually suffice” (webAIM 2020).

Transcriptions allow screen readers to read out loud the content and provide a method of searching content for keywords. This is useful to people with visual, hearing and learning difficulties.

Available accessibility help for time based media at RMIT

Media	Captions	Live Captions	Transcripts	Audio Descriptions
Studio (Canvas)	Yes - course coordinator/teacher must request captions (via Automatic Speech Recognition) within Studio editor	No - Studio is not a live streaming platform	No - however you can use the caption functionality to download and edit your file then upload it as a text file	No - however you can use the caption functionality to download and edit your file, then upload it as a text file.
Echo360 Lecture capture	Yes – you will need to create these (can use Automatic Speech Recognition)	Indirectly – via 3rd party Live Remote Captioning	Yes – via Automatic Speech Recognition (you may need to edit these)	No - you will need to create these
Echo360 Universal Capture	Yes – you will need to create these (can use Automatic Speech Recognition)	Indirectly – via 3rd party Live Remote Captioning	Yes – via Automatic Speech Recognition (you may need to edit these)	No - you will need to create these
Collaborate Ultra	Yes – you will need to create these or, if used, download the live captions from recordings	Yes – you can accommodate live captions, by bringing in a live captioner and assigning that role to a person	No – however, if used, you can use live captions from recordings to download and edit your file then upload it as a text file	No - you will need to create these

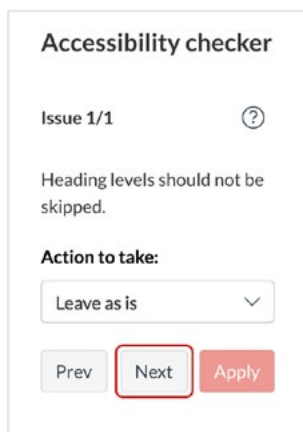
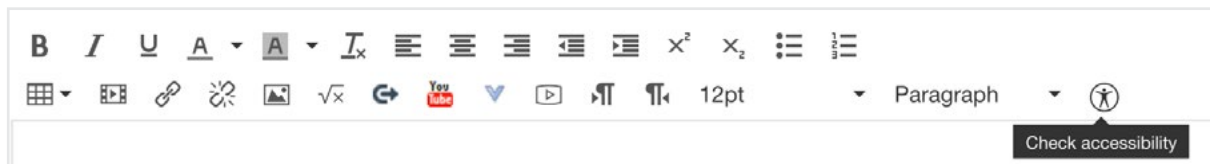
Language

The use of language, words, and phrases, will be dependent upon the particular discipline / industry you teach. However, it should be noted that, where possible, it is important to keep language as clear and simple as possible. WCAG guidelines recommend that you:

- write in short, clear sentences and paragraphs
- avoid using unnecessarily complex words and phrases
- expand acronyms
- provide a glossary for terms readers may not know
- use list formatting as appropriate (bullets or numbered)
- consider using images, illustrations, video, audio, and symbols to help clarify meaning. ([WCAG](#))

Canvas accessibility checker

Canvas has an accessibility checker which you can use on your pages in order to check for accessibility of images and content. This accessibility checker appears in your rich content editor when editing your page.



Note: this will not check for all of the elements mentioned throughout this document so it is important to develop good accessibility practice when building your course.

Ally

RMIT has implemented [Ally](#) within Canvas — an accessibility tool — which will check certain elements in your course for accessibility and give you a rating, an explanation and suggested changes/updates for rectification. You will see a rating symbol next to that particular item (see examples below).



25%

This image does not have a meaningful description

What this means

How to write a good description

Edit image description

string theory.jpg Save

The image description can't be the same as the file name.

Remove from image

Or Indicate image is decorative

This image is used for

9%

All issues

This PDF is untagged

Increase score up to 98%

Fix

This PDF does not have a title

Increase score up to 12%

Fix

9%

All issues

This PDF is untagged

What this means

How to tag a PDF

Upload a tagged version

Drop file to upload or

Browse

Accessibility for other file types

PowerPoints

RMIT has various resources outlining how to create and/or adjust your PowerPoints for accessibility.

[RMIT Teaching and supporting student guide on accessibility](#)

[Using PowerPoint themes guide \(PDF 6p, 450KB\)](#)

[Creating accessible PowerPoints \(PDF, 6p, 411KB\)](#)

[Learning and teaching hub resource videos](#)

Word documents

There are some steps you can take to make your Word documents more user/accessibility friendly.

[WebAIM guide to creating accessible Word documents](#)

[Vision Australia practical tips for Word and PDF accessibility](#)

[Microsoft guide to accessibility and Word documents](#)

[University of Washington guide to accessible Word documents](#)

PDFs

[WCAG guide to accessible PDFs](#)

[Learning and teaching hub resources on accessibility and tagged PDFs](#)

RMIT resources

[RMIT Digital Accessibility Framework](#)

[RMIT accessibility quick reference guide](#)

[RMIT writing style guide](#)

[RMIT Digital Accessibility Information](#)

Other resources

[Victoria government accessibility website](#)

[UK GOV Designing for Accessibility](#)

[Vision Australia](#)

[WebAIM](#)

Further information on colour and accessibility

[Use of colour \(WCAG\)](#)

[Vision Australia colour contrast analyser](#)

[Contrast checker](#)

[Contrast Analyser – Application](#)

[Contrast Ratio Analyser - online service](#)

[Colour Contrast Analyser - Firefox Extension](#)

[Colour contrast check](#)

[Colour contrast visualiser](#)

[Colour blindness simulator](#)

[CSS analyser](#)

References

Digital Accessibility Framework, RMIT University 12/05/2020 (<https://www.rmit.edu.au/about/governance-and-management/policies/diversity-inclusion-equal-opportunity-policy/digital-accessibility>)

Web Content Accessibility Guidelines 2.1, W3C World Wide Web Consortium Guidelines 12/05/2020 (Latest version at <https://www.w3.org/TR/WCAG21>)