Creating Accessible Course Materials (Faculty)

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Making a document "Accessible" means making sure that anyone can use it, regardless of an individual's need for accommodation. (Accommodations relating to documents generally support visual or auditory challenges.) Accessibility is a shared, ongoing responsibility for any member of the Penn community who develops, creates, publishes or shares course materials or other printed or online resources.

Students may have visual, auditory, or cognitive impairments that create challenges in accessing course content, and require the use of assistive technologies, such as screen readers and text-only browsers (for visually impaired) or captioning and signing (for auditorially impaired). Because documents and websites pose a huge barrier for visually impaired, this article focuses primarily on visual content.

> **Before You Start**
>
> To create or remediate printed or online documents, you will need:
>
> - **Existing documents**: Access to an editable version of the document or file
>   - .PDF versions of a document can be remediated, but it's best to fix the original file if it's available.
> - **New documents**: Access to programs that can create documents that are accessible (e.g. Microsoft Office products, Web publishing programs with accessibility checkers.)

The following principles can help make sure your course materials are accessible to students of all abilities.

General Best Practices

- **Use Alternate Text** (colloquially known as "Alt Text") to describe images, charts, and graphs that aren't described in the relevant text.

- **Share Files in Word or PowerPoint** Instead of PDF Whenever Possible

- **Convert and Verify** PDFs

- **Use the Check Accessibility** feature in Canvas

- **Provide closed captions and/or transcripts** for all videos and multimedia

- **Consider offering alternate formats** for course materials and assessments

Alt Text

Screen readers use "Alternate Text" -- often shortened to "Alt Text" -- to describe images, charts, and graphs. We recommend using these guidelines when you create Alt Text for your course materials and all digital files (including slide decks, assignment instructions, work samples, and readings) and any other kind of content placed on Canvas.

Images and Graphs

- Use Alt Text that describes what the image is showing.

- Limit Alt Text to 120 characters when possible.

- Alt Text should only include essential information.

- Avoid using image file names as Alt Text.

- Check that all images in the file contain Alt Text.

- Provide adequate information without giving away answers to the question or the exam.

- Check whether images convey content; if not, describe them as "decorative".

Students at graduation.
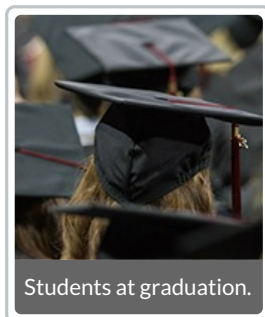
Sample ALT Text: Close up of graduating students, from behind.

Hyperlinks in Text

Hyperlinks allows the reader to click on selected text and be brought to a website or document being referenced. Alt Text is not needed when text is hyperlinked as long as the linked text describes the destination of the link.

> **Example**: For the sentence "See our article on how to make **Exam Accommodations** on our website", hyperlink the phrase "Exam Accommodations". The phrase describes where the link goes, so it is automatically accessible, and it does not need Alt Text.

Many screen readers announce the presence of links, so you do not need to include language like "Link to ___" in the alt text.

In certain cases, links may be displayed as a list of all links on the page to screen readers. In these situations, even if the text surrounding a link makes it clear where the link would lead a user, that context is critical to explain where the link is taking the leader.

Structuring / Sharing Documents

Keep the following list in mind when you are creating documents (or remediating them) and you'll make easy-to-use, enduring documents that work for everyone.

> **Best Practice**: Make sure you are working with the original document, if possible. Don't "fix" a .pdf if you have access to the original, otherwise you will need to redo it every time there is an update.

Use Headers

Headers give structure and create a hierarchy of importance to a document. Use predefined header styles whenever possible, and especially when creating Word, Excel, or PowerPoint files.

- Use the Heading Styles function in the program you're using.
  - Check Microsoft Heading Style Guide.
  - Avoid manually formatting heading font sizes or making headings bold.

- Use a logical progression for headers -- for example, heading level 3 should nest under a heading level 2. Do not skip heading levels for purposes of formatting or sizing.

  - In markup languages such as HTML, CSS, or other coding languages, headers are defined with the letter **H** plus a number: H1 for titles, H2 for main sections, H3 for subsections, etc. In applications such as Word or PowerPoint, they are called "Headings". In Canvas, this application is called a "Page Title".

- Headers and heading paragraphs should contain no more than 120 characters.
  - A heading paragraph is used to summarized the information being discussed in the paragraph. This should summarize -- not repeat, information or content written in the paragraph.

- Tables are complicated for screen readers and need to be well constructed.

  - Table headers should specify the scope of the table and its structure

  - Tables should have at least one header

  - Tables need a caption describing what the table contains.

- Use descriptive text for links, for example: "See our article on how to make **Exam Accommodations** on our website". Avoid vague instructions such as **click here.**

  - If vague instructions are unavoidable, make sure that the link's alt text is descriptive.

- Use the List tool to format numbered or bulleted lists. (Don't make your own bullets!)

- In PowerPoint, ensure that each slide has a unique and informative title, to distinguish it from previous slides.

  - If your slide should not display a title, create a hidden title so the screen reader can use it.

- Excel can be harder to make accessible than other Office apps. For assistance, use Microsoft's Accessibility Guide for Excel

Microsoft has additional tips and guideline in their Knowledge Base article, Create Accessible Office Documents.

Convert and Verify Accessible PDFs

An accessible PDF has the following components:

- Header

- Structure

- Alt Text (Alternate Text)

- Tags

We recommend you build your syllabus as a Canvas page rather than relying on PDFs as a primary source of information. If you must use a PDF, run it through it through Adobe Accessibility Checker before uploading to Canvas.

When working with PDFs, try to update the original document whenever possible, and then recreate the PDF. This will save a lot of extra work in future iterations.

When you don't have access to the original document, use these steps to make your PDF accessible.

Verify a PDF is Accessible

To verify your PDF is accessible:

1. Choose **Tools > Accessibility**. The accessibility toolset will be displayed in the secondary toolbar.

2. Click **Full Check/Accessibility** Check to open the **Accessibility Checker Options** dialog box.

If you have access to the original document that created the .pdf, be sure to update that first, to speed any future remediation needs.

Convert a PDF to Make It Accessible

To convert a PDF into an accessible document, use the **Make Accessible** action in Adobe Acrobat Pro.

1. Select **Tools > Action Wizard**. This will appear in the secondary tool bar.

2. Click **Make Accessible** from the actions list.

3. Select the document that you want to make accessible or use the currently open document.
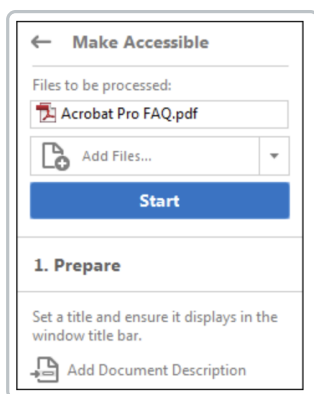
4. Click **Start** and follow the prompts to make the document accessible.

For additional information, see Create and verify PDF accessibility (Acrobat Pro).
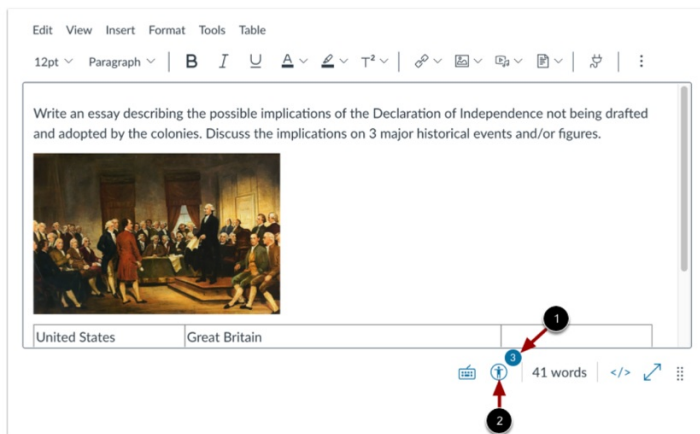
Checking Accessibility in Canvas

The Canvas Accessibility Checker is an easy-to-use tool located on the bottom right side of the Rich Content Editor text box.

1. Click the icon to scan the page for any accessibility issues.
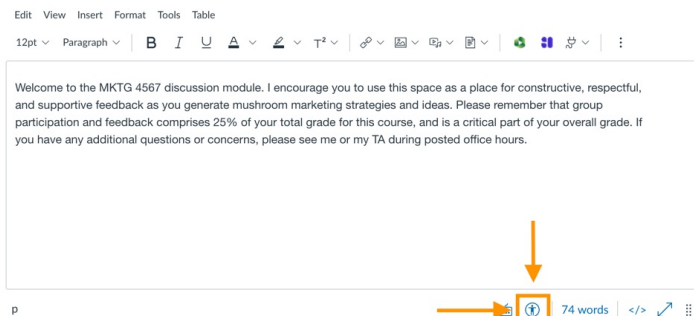
2. If any accessibility issues are detected with the Rich Content Editor, the Accessibility Checker display an indicator [1].


If any accessibility issues are detected within the Rich Content Editor, the Accessibility Checker display an indicator [1].

To view accessibility issues, click the **Accessibility Checker** icon [2].

3. To view accessibility issues, click the Accessibility Checker icon [2].
4. When an issue is detected, the Rich Content Editor highlights the affects area [1]. The wide bar displays the accessibility attribute [2] and an explanation of the error [3]. To learn more about the accessibility attribute, click the information icon [4].

View Issues
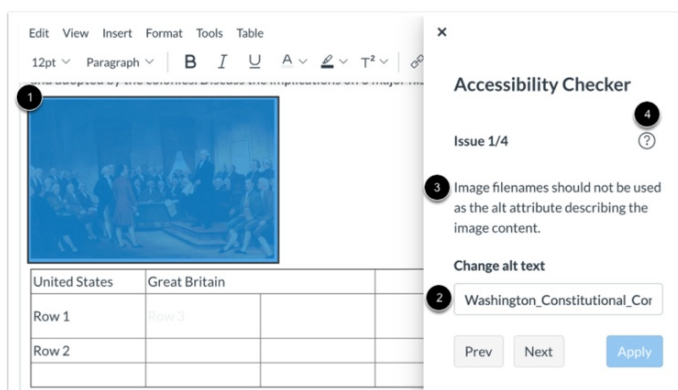
When an issue is detected, the Rich Content Editor highlights the affected area [1]. The sidebar displays the accessibility attribute [2] and an explanation of the error [3]. To learn more about the accessibility attribute, click the **Information** icon [4].

5. Issues are detected and listed individually [1], to scroll through the issues you can use the "Previous" and "Next" buttons [2] in the Accessibility Checker.
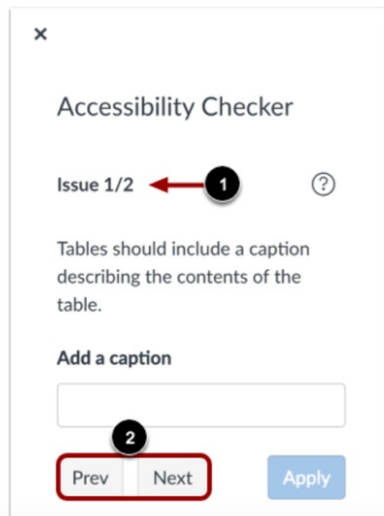
6. The Accessibility Checker will alert you once all issues have been fixed.
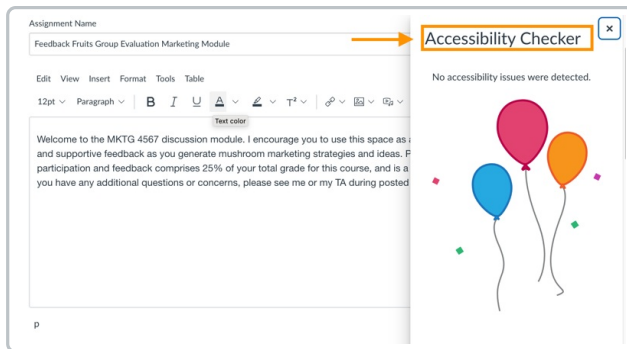
Provide Closed Captions and/or Transcripts for Videos and Multimedia

Faculty, students, and staff can request transcripts and closed captioning for videos and other multimedia by submitting the Caption Request Form. Faculty can also reach out to their Academic Computing Support representative for additional help.

Planning Caption Requests

- Captioning turnaround time is four business days, and the cost is covered for course materials.

- Expedited turnaround of two business days may be available, depending on vendor availability.

Good to Know: Requests requiring faster than a four-day turnaround may not be guaranteed.

Consider Alternate Formats for Course Materials and Assessments

Students of all abilities appreciate flexibility in course materials. Try to offer materials in a way that can be interpreted using more than one sense. For example, a video or podcast with a transcript can be digested in multiple ways.

Please contact the Courseware team to schedule an exam consultation if you have any questions about how to create an accessible assessment.

Student Accommodation Requests

Students should contact Student Disability Services (SDS) at least **eight days in advance** of exams to register for the appropriate accommodations. SDS or the program office will let you know if a student in your course needs accommodations. To set up accommodations in Canvas, please see the Exam Accommodations guide.

Additional Resources

- **Courseware Team Consultation:** Faculty, TAs, and staff are welcome to contact the Courseware team to schedule an accessibility consultation by emailing courseware@wharton.upenn.edu.
- **Review your Students' Accommodations:** Visit MyWLRC Portal to review student accommodations in your courses or to request alternate formats for course materials.
- **Penn's Policies on Accessibility:** For more information about the University's commitment to equal access, visit Student Disability Services and Web Accessibility at Penn.