

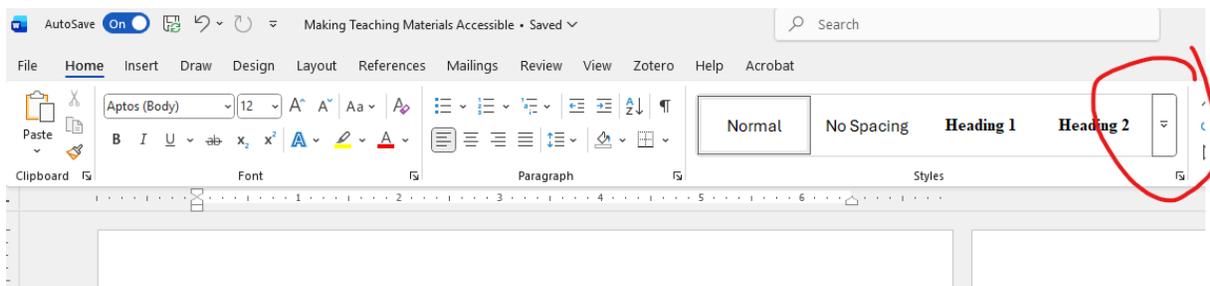
Making Teaching Materials Screen Reader Accessible

Screen reader accessibility relies on three components to work properly

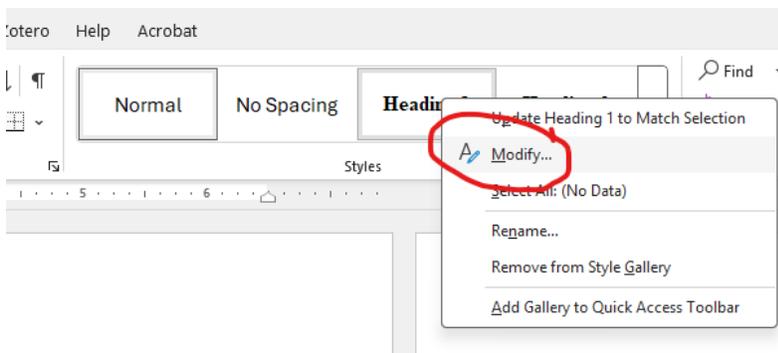
1. Text in programs with word processing capabilities (e.g., Word or PowerPoint) or text recognized by Object and Character Recognition (OCR) in PDF software (e.g., Adobe Acrobat). Pictures or graphic content will need to be provided with alternative text.
2. Accessibility tags in HTML (websites) or PDF documents. These tags indicate the purpose and hierarchy of blocks of text, tables, and other elements in the document.
3. Reading order of the accessibility tags. Tags are given an order to be read by the screen reader.

Creating Word Docs for Accessibility

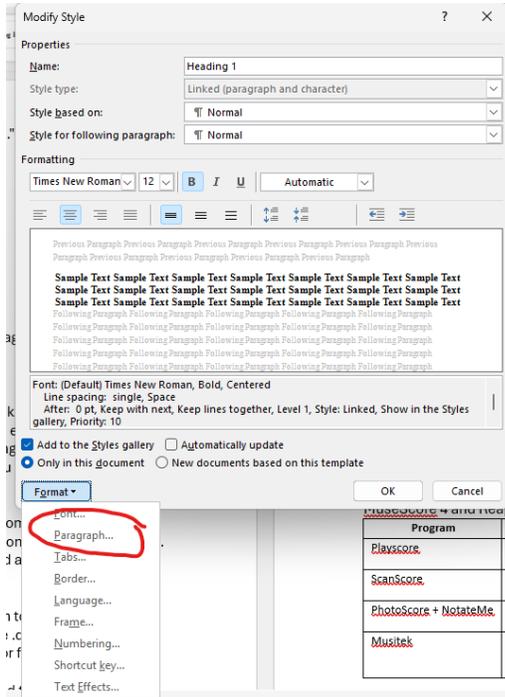
1. Use the Styles tool under the **Home** menu to create headers.



- Right-click each header you use and select "Modify..." to change the font settings.



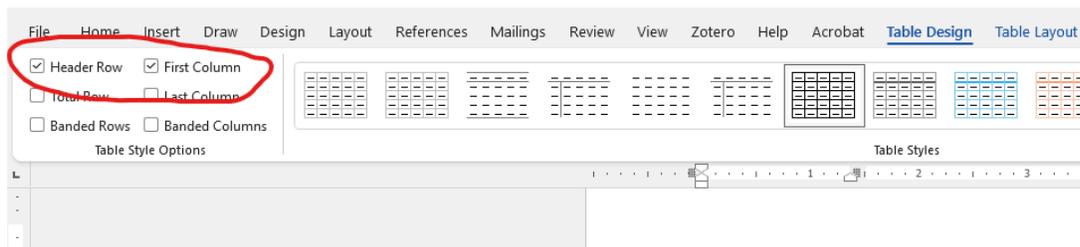
- In the “Modify...” menu. You can also change the paragraph formatting for each header.



- **Don't skip header levels.** In the "Modify..." menu, click the format dropdown menu, select paragraph, and check "outline level" to ensure that your headers are organized in order. This option also changes how they appear in the navigation pane AND your table of contents if you use the Word function to generate it.

2. Tables accessibility

- Standard tables should have defined header rows. Some tables will need a header column. Insert or Select your table and click on the **Table Design** tab. The “header row” box should be checked. If you need a header column, the “First Column” box should be checked.



- Screen reader software will read the header rows and header columns before reading the entry of every cell. Only check these boxes if that is the reading order needed to make sense of the content.

- Avoid using tables for formatting. However, if you do use headers for formatting, you will want to *uncheck* the “Header Row” and “First Column” options and you may need to manually retag the table as a paragraph in Adobe Pro.
3. Add alternative text to Images, Graphics, and SmartArt
 - Click on the image/graphic. Click on “Picture Format” or “Format” in the top menu ribbon.
 - Click on “Alt Text” and a rich description of the content and intent of the image/graphic.
 - You can try using Word’s Alt Text Generator or other AI tools to generate appropriate Alt Text for your image/graphic. ChatGPT is very good at this...
 4. Click on "Review" and click the "Check Accessibility" button to review other accessibility issues in the document if you intend to use the .docx for distribution.
 5. Add a document title to the metadata. This issue is not reported or fixed in Word’s accessibility checker, but Ally and Adobe will flag it.
 - You can add by selecting: **File > Info > Properties** and typing in the **Title** field.
 6. Optional: Save as a PDF and use the process under **Making PDFs Accessible**

Acquiring or Scanning High-Quality PDFs

1. Use e-book or library website downloads whenever possible.
2. If the document is not available through UIowa Libraries, try requesting the document through the [Interlibrary Loan and Document Delivery](#) service.
3. *Do not* use a printer scanner bed as these will create a lot of artifacts in the scan that will interfere with OCR.
4. If you need/want to scan a chapter or document yourself, you can use the following options to get scans of the documents:
 - *Best choice:* Your [iPhone Notes app](#) or the [Genius Scan app](#) for Android (free). When using the latter, be sure to turn on curvature correction in the settings (iPhone Notes does this automatically).
 - *Also available:* Library document scanners.
5. Change the settings to Black and White and PDF output in whatever option you choose. You want the contrast to be as high as possible while preserving the visibility of pictures and graphics.
6. If you are looking for something that will change handwriting to editable text, Google Lens is the most widely available.

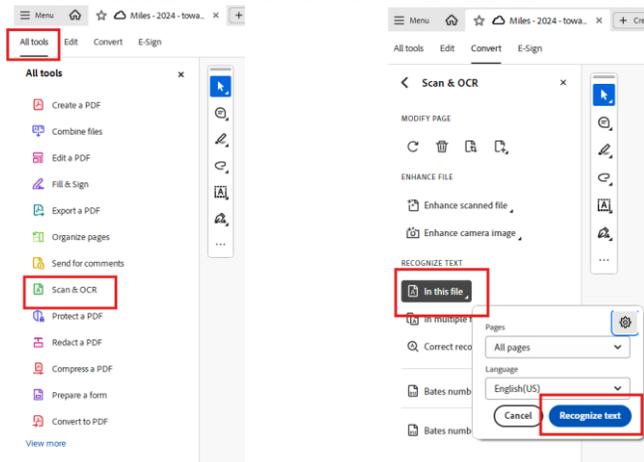
Making PDFs Accessible

Note: Adobe's accessibility tool requires an Adobe Pro license. You must email help@uiowa.edu to request access.

If you scanned the document yourself or the text in the PDF is not selectable, you will need to run Object and Character Recognition (OCR). If the text is already selectable, move on to the accessibility tagging process.

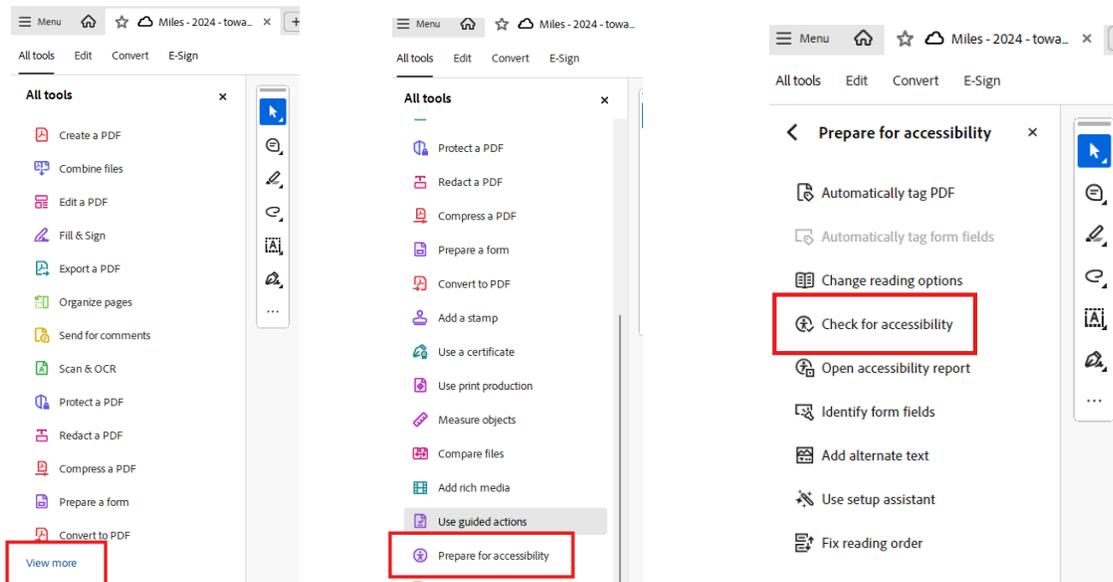
Run OCR

1. Click "All Tools"
2. Click "Scan & OCR" > "In this file" > "Recognize Text"



Run Accessibility Checker

1. If you downloaded the document from a library resource or document delivery, run the accessibility checker to see if the document already has accessibility tags.
 - Click "View More" in the Tools menu
 - Click "Prepare for accessibility" > "Check for accessibility". Click "Start Checking"



- Once the Accessibility Checker is complete, a report will pop up on the right side. Click on “Page Content” and see if the “Tagged content” passed. If it passed, you can review the report item by item by right-clicking on each flagged issue and selecting "explain" or "fix." Doing the latter will automatically fix most issues. If it did not pass, proceed to the ***Auto-tagging a PDF*** section.

Auto-tag a PDF

1. Click "View More" in the Tools menu. Click "Prepare for accessibility" > "Automatically tag PDF"
2. Save and close the document.
3. Right-click on the saved file and select "Properties." Select the "Details" tab and enter an accurate Title in the document’s metadata. Click “Okay.”
4. Open the file again and rerun the Accessibility Checker (see above). Use the fix feature to fix as many issues as possible.
5. Save the document again.

Note: This process will make your documents appear “Green” in Anthology Ally on ICON, but it does not ensure that your documents are truly accessible. There are additional steps needed to check and adjust the accessibility tagging reading order. If you would like to address those issues, it is highly recommended to attend a training or seek help from [Student Instructional Technology Assistants \(SITAs\)](#) in the Office of Teaching and Learning Technology.