Accessibility Checkpoints for WORD DOCUMENTS in Online Courses

> This Accessibility Checkpoints guide provides recommendations on how to make common elements in your **Word** documents accessible to all students, including students with disabilities. The steps outlined in this guide are for Microsoft Office 365.
> ***This guide is not intended as a tutorial on how to use Word.***

## CONTENT IN THIS CHECKPOINTS GUIDE

BEFORE YOU BEGIN: MEET MICROSOFT'S ACCESSIBILITY CHECKER

Microsoft has an **Accessibility Checker** in Word. You can use this tool to identify and correct many accessibility issues in your document as you go. There a few ways to access the Accessibility Checker in Word; two of these are described below.

1. Access this tool from your Word Menu bar:
    FILE → Info → Check for Issues → Check Accessibility
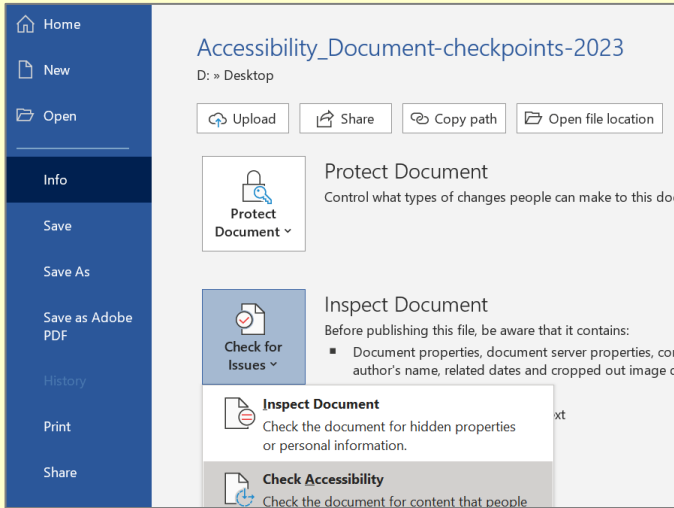
2. You can also access the Accessibility Checker from the **Review** tab in your menu bar.
    REVIEW → Check Accessibility
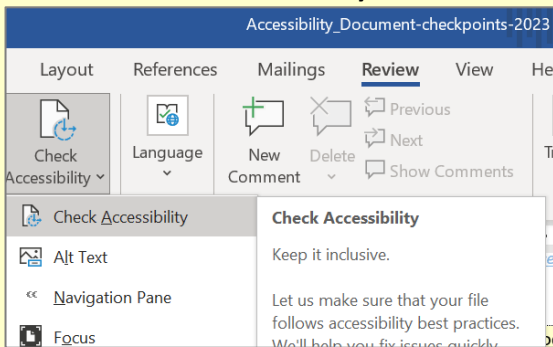
The Checker reviews your document and provides "Inspection Results", identifying accessibility errors and warning. These errors and warnings are followed by feedback (*why the issue is important*) and tips (*how to repair the problem*). All accessibility improvements you make to a Word document are retained if you save the file to PDF format.[1]

CRITICAL CHECKPOINTS FOR WORD DOCUMENTS

Required for **ALL** documents:

- [A document title and default language](#)
- [Use proper headings](#)
- [Proper document structure](#)
- [Concept is not dependent on colour to be understood](#)

Required for all documents when applicable:

- [Provide text alternatives for images, charts and diagrams](#)
- [Use descriptive text when adding embedded links](#)
- [Data tables provide row and column headers](#)

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1. DOCUMENT TITLE AND DEFAULT LANGUAGE

Why do you need to include a document title?

Digital documents should have titles that describe their function and purpose. A ***title*** should not be confused with the main heading of the document, which appears within the document text. A ***title*** is defined in the Word document's properties.
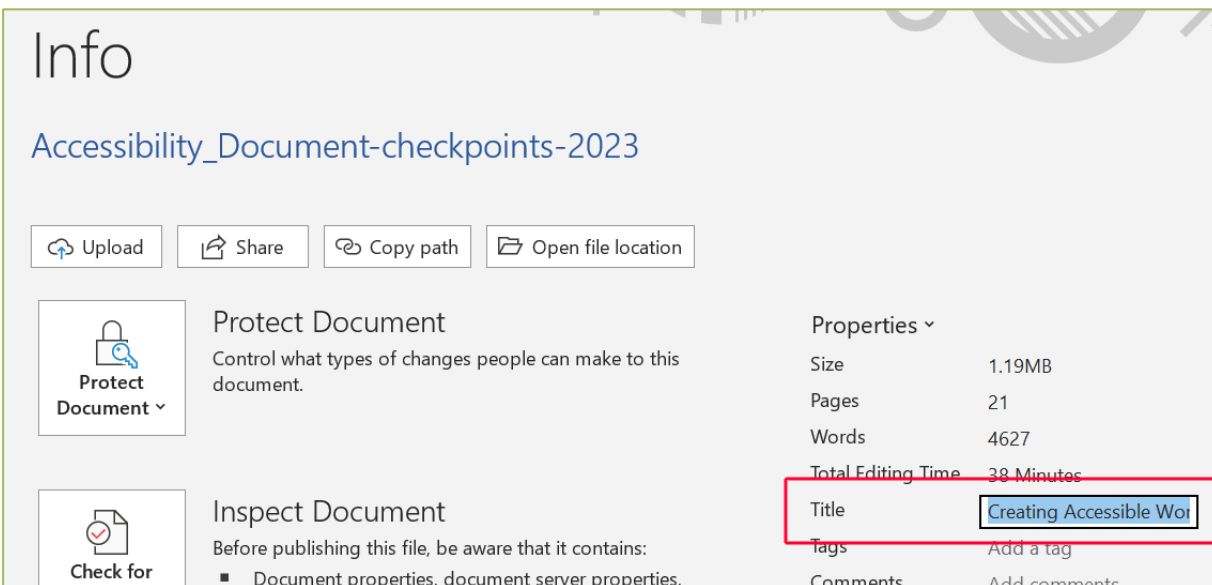
It is fine to use the same text for your title as for your document's main heading; the key consideration here is that the title be a concise description of what the file is about.

Including a meaningful document title supports a student who:

- Uses a screen reader to access course files.
  The title is typically the first content a screen reader announces when the document is loaded and provides helpful context or confirmation about the subject.

- Accesses an alternate format of your Word documents.
  The title attribute will also be converted if a student opts for an HTML or PDF version of your Word files. The title will display in a browser tab and helps students to navigate between multiple open tabs and files.

To view or add a title to your Word document, go to **FILE → Info: Properties → *Title***.

In the screenshot below, the location for the title is shown under Properties on the right side of the screen. The full title text for this document reads as: "*Creating Accessible Word documents: A series of checkpoints to follow*".

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Why do you need to set the document's default language/s?

Most screen reader applications support multiple languages. However, screen readers are unable to detect what language a document is written in based on the document text alone. A screen reader requires that a default language is identified within the document properties.
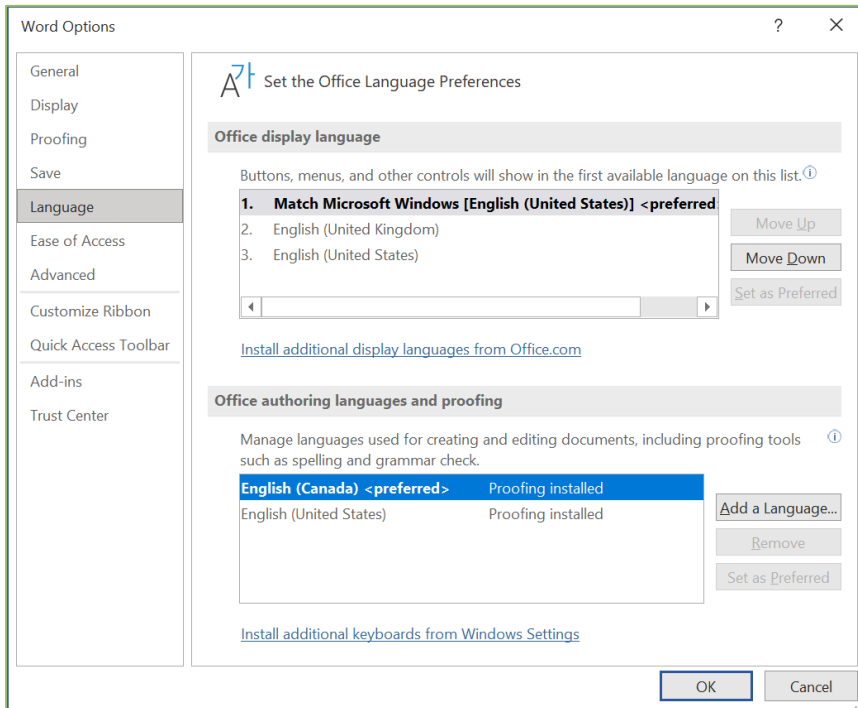
Setting the document's default language supports a student who:

- Uses a screen reader to access course files.
  This setting helps the screen reader to determine how to read and pronounce words correctly.

Your Word application is probably already set up now with English defined as the default language for both the *display language* and the *authoring language*. Accessibility recommendations include specifying **both** of these language settings.

To confirm or change the default display and authoring language settings in your Word program, you can either:

1. Go to **FILE → More →Options → Language.** You will be able to confirm or change the default language set or add a new one here.
   or
2. Go to Review in your Word menu bar and select **Language → Language Preferences**.

<mark>CHECKPOINT 1: DOCUMENT TITLE AND DEFAULT LANGUAGE</mark>

Yes/No	Does your Word document:
	Include a **TITLE** in the document properties that clearly and succinctly describes the document's function and purpose?
	Include settings for the document's default *Authoring* and *Proofing* language?

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2. HEADINGS

What are headings?

Headings help to identify the hierarchical structure of a document (e.g. sections, sub-sections). Headings provide a visual cue that helps a sighted reader quickly navigate through sections of a document, skimming through content until they find a section they are looking for. Similarly, true headings create logical divisions in your content and allow a non-sighted user to navigate a page or document easily using assistive technology (e.g. screen reader).

Why do you need to worry about headings?

To put it plainly:

> *"A good heading structure is probably the most important accessibility consideration in most Word documents."* [2]

When it comes to using visual references to indicate the hierarchy and structure of your document, you may be accustomed to just using the ***Font*** formatting tool to create the impression of a heading by changing the font face, enlarging the font size, applying a bold, underlined or italic style, etc.

For accessibility purposes, the problem with this approach is that while for a visual reader the text will *look* like a heading, a screen reader won't *identify* the text as a heading. A screen reader will just read through the text as if it were part of another paragraph of content and will miss your intended cues about structure and organization. In Word, you should use the ***Styles*** tool to create hierarchical header structure in your document that screen readers will identify.

Example of text formatted to LOOK like a heading; all the formatting has been manually added using the **Font** tools:

This text only LOOKS like a heading

Example of a TRUE heading, using the **Styles** tool; all of the formatting here is part of the "Heading 4" style settings in this document:

#### This text is formatted as a real heading (Heading 4)

Using proper heading styles supports a student who:

- Is blind or has low vision and **cannot access visual cues about content organization and sequence**.
  A screen reader will identify true headings, which gives the user information about the structure and organization of the content in your document. Text that is only formatted to look like a heading will only be identified by a screen reader as a new paragraph.

- Is blind or has low vision and **wants to skim the document to find a specific section**.
  A screen reader can "skip sections by jumping from one heading to the next, or display a list of all of the headings in a document, or sort the list of headings alphabetically or in the order they appear in the document." [3]

- Has a cognitive processing disorder or dyslexia and benefits from having **headings to help navigate through documents more efficiently**.


How should you use headings?

To create a document structure that will be understood by a screen reader:

1. Use the **Styles** tool and begin with the built-in heading styles* (i.e. Heading 1, Heading 2, Heading 3, etc.)
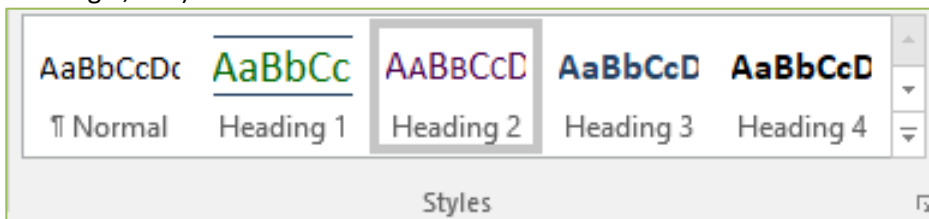
   *You can modify these *Styles* if you want to apply different font types, sizes, line spacing, etc. Right-click on the Style and select "Modify" to access and revise the formatting settings.
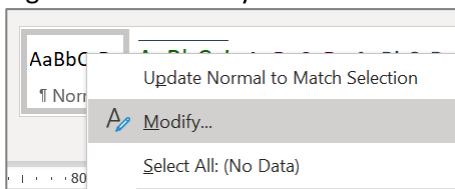
2. Nest headings and sub-headings properly [4]
   (e.g. a document can have **only one Heading 1** and it is the main heading for the document; the sub-heading for a **Heading 1** is a **Heading 2**, the sub-heading for a **Heading 2** is a **Heading 3**, etc.)

3. Do not skip heading levels.

CHECKPOINT 2: HEADINGS

| Yes/No	Are your Headings:
	Based on **true headings**, defined in the Styles tool?
	Nested in proper (hierarchical) sequence?

3.   CREATING DOCUMENT STRUCTURE IN WORD

This section builds off the recommendations from the [previous section on headings](#) and their role in defining the structure of your document.
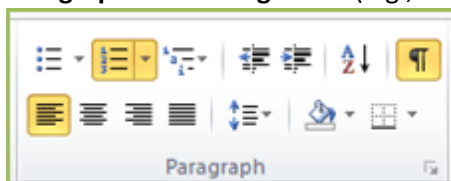
What is document "structure"?

When we talk about *structuring* a Word document for accessibility purposes, we are primarily referring to *tagging* elements of your document using such features as **styles, bulleted and numbered lists, and paragraph spacing**. This tagging ensures that a screen reader will interpret your headings, lists, italicized citations, etc. correctly.

Styles menu (e.g., for headings, italics, quotations, paragraphs)
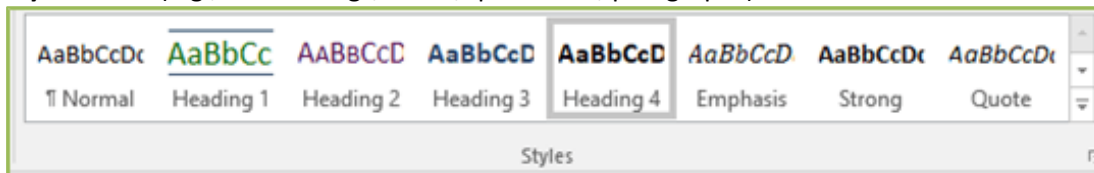
Paragraph Formatting menu (e.g., for bulleted and numbered lists, paragraph spacing)

Why do you need to worry about document structure and styles?

To ensure your content is marked up or tagged in a way that will be accessible to screen readers, use the [Styles and Paragraph Formatting menus](#) to format your document's content and layout.

"Even the most complex documents can be made easily navigable with a screen reader if the correct styles and formatting are applied. By applying this type of formatting, people who are blind or who have low vision may be able to access and read documents as quickly and as efficiently as their colleagues who have good vision."[5]

Using proper document structure supports a student who:

- Is blind or has low vision and **cannot access visual cues about content organization and sequence**.
  A screen reader will identify headings, lists, tables, etc., which gives the user information about the structure and organization of the content in your document. Text that is not formatted with Word "tags" may be interpreted by a screen reader as a jumbled or run-on paragraph.

Specific Document Structure Considerations

Consider the formatting of Numbered Lists.

A sighted user might not notice a difference between the two numbered lists below. However, the list on the left uses a proper "Heading 4" style for the title and a true numbered list for the items, while the list on the right was manually formatted to *look* like a list but does not use proper (tagged) Styles or Numbered lists:

Example of Structured	*Example of Unstructured*
Shopping List 1. Apples 2. Milk 3. Spinach	**Shopping List** 1. Apples 2. Milk 3. Spinach

When listening to the structured example on the left, a student with a screen reader would be told that there is a *heading* followed by a *list containing 3 items*; each item is identified as being part of this numbered list:

> *"Begin heading level 4, Shopping List. Begin numbered list with 3 items. Item 1 of 3: Apples, Item 2 of 3: Milk, Item 3 of 3: Spinach"*

When listening to the unstructured example on the right, a student with a screen reader would hear the content as a confusing, incomplete sentence. There is no identification of a heading or that this is a list, and the numbers don't clearly correspond to the items in our list:

> *"Shopping List 1. Apples 2. Milk 3. Spinach"*

Consider the formatting of Paragraph Spacing

In addition to creating [proper headings and lists](#), it is equally important to create paragraph spacing correctly. To do this, edit settings in your **Paragraph** and **Styles** menus and define the amount of space you want to see between sections of text.

Do **not just use multiple carriage returns ("Enter") to create this white space**. This is because:

> *"When paragraph line spacing is done incorrectly with multiple 'carriage return' (¶) characters, screen readers hear "Blank... Blank... Blank..." for each line"*[6]

Instead, you should define this space before or after the paragraph in the "*Spacing*" section of your **Paragraph** settings.

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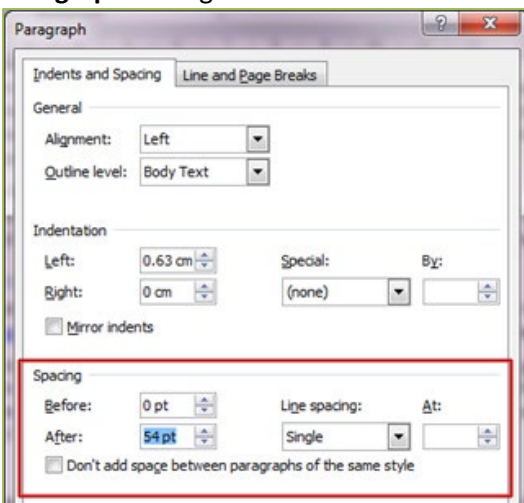
CHECKPOINT 3: CREATING DOCUMENT STRUCTURE IN WORD

Yes/No	Is your document structure:
	Based on settings defined in Word's **Paragraph** and **Styles** menus? *This includes properly marking up elements such as headings, bulleted list, numbered lists, italics, etc. when formatting your text, as well as managing paragraph spacing and indentation.*

4. ALTERNATIVE (ALT) TEXT FOR IMAGES, TABLES, CHARTS AND DIAGRAMS

Why do you need ALT text?

Providing alternative text for visual items in documents supports a student who:

- Is blind or has low vision.
  ALT text is read by screen readers in place of images and provides an alternative source of the content conveyed by the image.
- Has a cognitive disability.
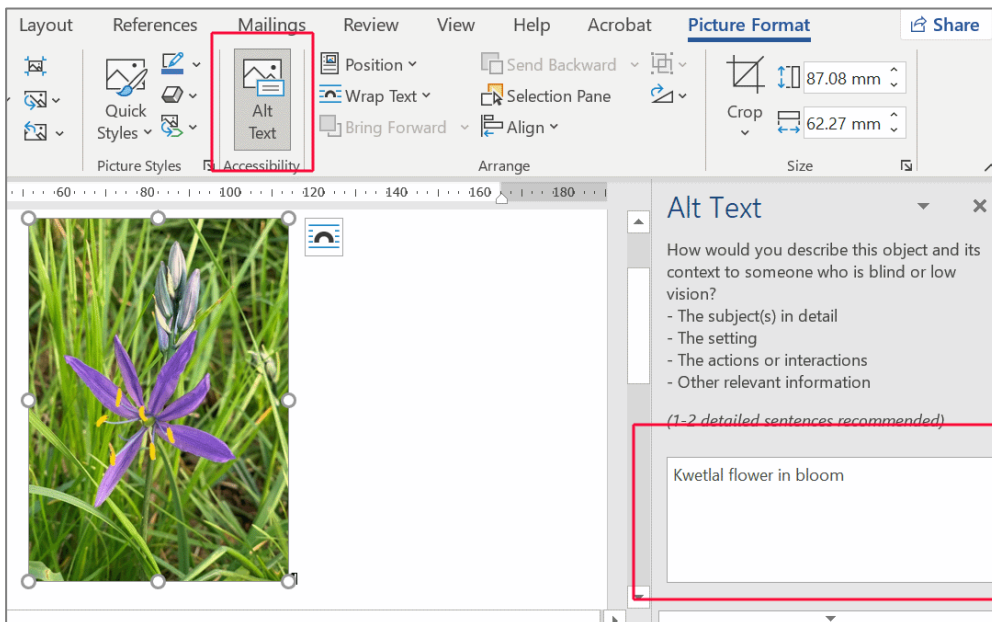 *ALT text can help clarify or describe the concept/s being conveyed by the image.*

What should your ALT text say and how should you add it to your document?

In 1-2 sentences at most, how would you describe the intended concept of an image to someone who wasn't looking at the page?

Now try writing alternative text for each image, succinctly describing the intention of the image to anyone who cannot see it. **Alternative text must convey the content and functionality of an image**; it should be more than a generic description of the image (e.g. *"This is a photo of cat"*). Rather than simply telling someone what the image looks like, **ALT text** should convey what the content of the image is and what it means in the context of the topic it supports.[7]

To add an ALT Text description to an image in your Word document:

1. Click on the image to access the **Picture Format** tab
2. Select **Alt Text** from the menu bar and enter your text description for the image.

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Yes/No	Is your ALT (Alternative) Text description:
	An **accurate and concise** description of the image/chart/diagram that conveys its content and function? *Typical maximum: 1-2 short sentences.*
	Providing **NECESSARY information?** *ALT text description **should not include phrases like "image of…" or "graphic of…"** to describe the image; screen readers will already identify the object as an image.*

5.   THOUGHTFUL USE OF COLOUR & BACKGROUND IMAGES

What do you need to consider when using colour in your Word documents?

When using colour in your Word files (e.g. in diagrams or as background), confirm that it is being used "as an enhancement, [and] is **not the only means of conveying information**."[8]

Provide additional visual cues so students can access the content even if they:

- Are colour blind and cannot differentiate between certain colours.
- Are using a device with monochrome display.
- Have poor contrast vision.

What do you need to consider when using background images or textures?

If you are presenting information in a background image,

> "screen reader users and some users of screen magnification applications will not be able to access [this] information"[9].

Similarly, avoid using textured or patterned backgrounds behind your document text, or using pale font colours. Students who have poor contrast vision may not be able to perceive text that is presented on patterned background, or pale-coloured text on a white background.[10]

CHECKPOINT 5: THOUGHTFUL USE OF COLOUR & CONTRAST

Yes/No	When you use colour in your course content, is there:
	More than one means of conveying that information? *If the point you are making depends on colour to be understood, you may need to edit your image or formatting so that concepts presented in the visuals are not lost to those who are colour blind or who require high contrast between colours or who are printing your files to a black & white printer.*
	High contrast between background colour and foreground text colour? *Users with poor contrast vision may have difficulty accessing content that is not presented as dark text on a light background, or light text on a dark background.*

6. DESCRIBED LINKS

When you are linking to websites, adopt the habit of **describing the destination or the purpose of the link**.

Students who use screen readers can tab through the links on a page or call up a list of all the links on a page. It is important that your links make sense when they are accessed *without* the context of surrounding content.

For example, consider the list of links a student could generate from this page and how much meaning each link would have when accessed without the context of surrounding text:

- https://youtu.be/YI5056VNOvw
- Resources & References
- here
- 10 Best Fan Theories About The Big Lebowski

Practices to follow when it comes to embedding links in your documents

1. **DON'T** just paste in a website address (URL)*.
   URLs tend to be long, difficult to follow when read aloud, and rarely contain useful information themselves.

   - Consider this example: "Please view https://youtu.be/YI5056VNOvw in preparation for this week's graded quiz"
     While you might understand that this URL takes you to a YouTube video, the link itself provides no information about the content you will find.

   *Exceptions for embedding full URLs in a Word doc might include a page of Resources & References in which the reader expects to see the website address included as part of a citation, or if the document is going to be printed and distributed as a hard-copy.

2. **DON'T** embed URLs behind generic text like "click here".
   Formatting links like this does not provide students with any context about where the link goes and what students should expect to find.

   - Consider this example: "Click here for the best fan theories about The Big Lebowski."
     If this link is not heard in the context of the surrounding text, the student has no idea where the link is taking them.

3. **DO** embed URLs behind descriptive text.
   The descriptive text needs to provide context for the link so that it still makes sense even without the support of surrounding text in the document.

   - Consider this example: "10 Best Fan Theories About The Big Lebowski".
     Whether a student is reading this link in context of surrounding content, or listening through a list of links they have collected with their screen reader, they will understand what the embedded URL is about and what to expect when they open the linked site.

   To create descriptive links in your Word documents, follow these steps:

   1. Type your descriptive text for the link.
      For example: "A new website takes a deep dive into 'The Big Lebowski'"

2. Select this text and right-click with your mouse to select "**Link**"
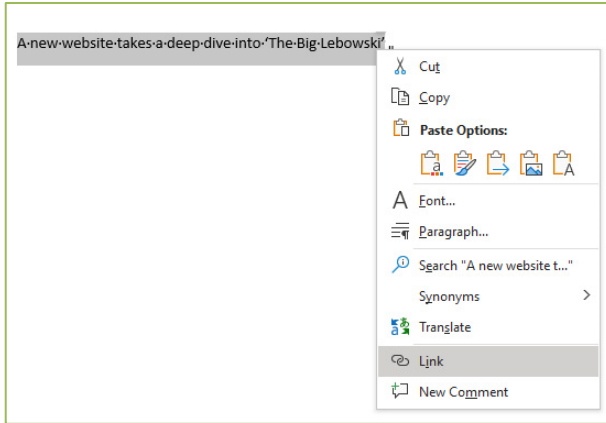
3. Type or paste the URL into the address bar and click "OK".
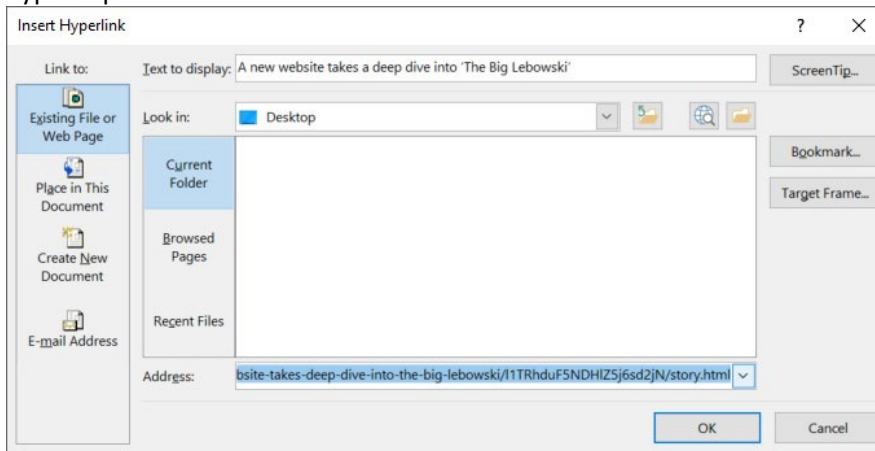
4. Your descriptive link will now appear on the page:
   "A new website takes a deep dive into 'The Big Lebowski'"

CHECKPOINT 6: DESCRIBED LINKS

Yes/No	When you embed links to websites in your Word documents:
	Are they descriptive? *Have you provided readers with context for where the link will take them?*

7. DATA TABLES

What do we mean by "data tables"?

The purpose of using tables is to present information in a grid format, using columns or rows to align and organize the information in that grid. **Tables should only be used to present data; they should NOT be used for design layout**.

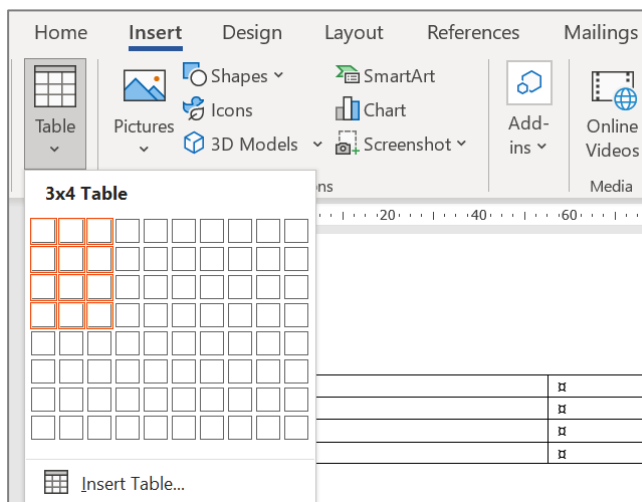Tables are a handy tool to use for presenting data like course schedules, grading criteria and rubrics, or instructor contact information and office hours. In Word, data tables are created using the "**Insert Table**" tool.

What do you need to consider when using tables in your Word documents?

"Sighted users can visually scan a table [and] quickly make visual associations between data in the table and their appropriate…column headers. Someone who cannot see the table cannot make these visual associations."[11]

Applying proper structure to your data tables supports a student who:

- Is blind or has low vision.

  Screen readers read tables horizontally and top-to-bottom, cell by cell, row by row. If you create properly structured tables, students who cannot see the table will still be able to track where they are in a table and make sense of the data contained in each cell.

In the same way that your document needs proper headings and structure, tables need proper structure to be accessible. This means that you must add **Column Headers** to define each column of information, and provide a **summary** of the table.

- A **table summary** (or ALT text) provides context to a student before they begin to listen to the table, and advises them about what data they should expect to find in the table.

- **Column Headers** help give the context of the data in each cell. When this structure is in place, a student using a screen reader will be able to navigate through the table, one cell at a time, and will hear the column headers for each cell, along with the cell's data.

Formatting simple Word tables for accessibility.

When creating data tables in Word, the following formatting steps will help make your table accessible:

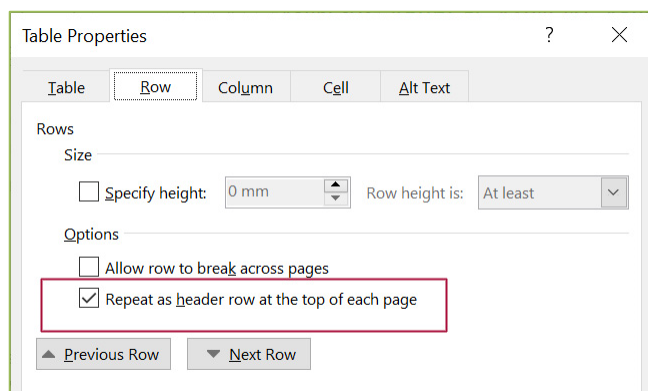1. **Organize your table with clear and meaningful headers at the top of each column.**

    For example, the table below includes 3 columns and each column is defined with a header (*Student Name*; *Topic*; *Presentation Date*):

Student Name	Topic	Presentation Date
Marilla Cuthbert	*Classic Canadian children's books*	November 24
Dave Foley	*Classic Canadian humour*	November 25
Freddie Kreuger	*Partisanship of the horror genre*	*TBD*
Sam Elliott	*Why the Western genre isn't for everyone*	*TBD*
Walter	*Heroic animals in classic fiction*	*TBD*
Jeffrey Lebowski	*A brief history of Persian rugs*	*TBD*
Maude	*Perspectives of feminism in art*	*TBD*
Da Fino	*The Private investigator as depicted in popular fiction*	*TBD*

2. **Define the Header Row at the top of your table and allow it to repeat in case the table needs to span across multiple pages**. Readers won't have to scroll back to the beginning of the table to figure out what the data cell content relates to.

    Select the top row of your table and right-click to access the drop-down menu to open the *Table Properties*. Find the Row tab and select the options to:

    ✓ Repeat as header row at the top of each page

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3. **Add an ALT Text description of the table's purpose to provide context.**
   In the Table Properties, find the Alt Text tab and add a brief description of the table in the Description field. This description is read aloud by screen readers and helps students understand what the purpose of the table is before they begin listening to the data it contains.
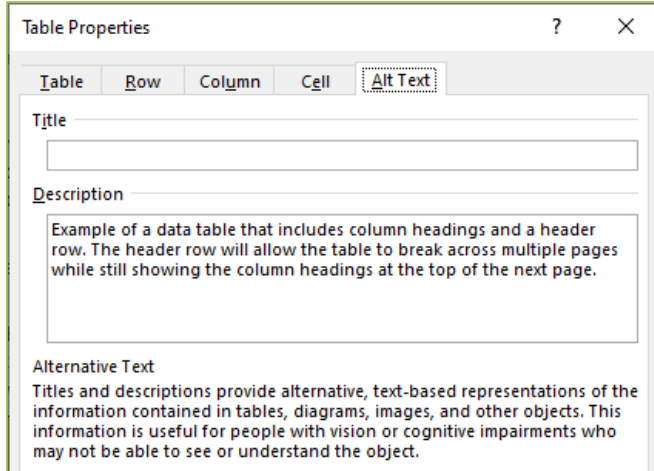
When listening to the above table, a student using a screen reader will hear the second row of the table (*Marilla Cuthbert*) something like this:

> *"Row 2 of 3, column 1 of 3 with column heading Student Name: Marilla Cuthbert; column 2 of 3 with column heading Topic: Classic Canadian children's books; column 3 of 3 with column heading Presentation date: November 24"*

Additional accessibility considerations for tables

1. **Do not just use tabs and spaces to align text to look like a data table**. The format may look similar but does not provide any of the structure or context required by a student using a screen reader.

   Here the instructor has just used a combination of tabs and bolded text to format and align the same information:

Student Name	Topic	Presentation Date
Marilla Cuthbert	Classic Canadian children's books	November 24
Dave Foley	Classic Canadian humour	November 25

   When listening to the information presented this way, a student with a screen reader will hear the data as a run-on sentence lacking any organization or context:

   > *"Student Name Topic Presentation Date Marilla Cuthbert Classic Canadian children's books November 24 Dave Foley Classic Canadian humour November 25"*

2. **Avoid split and/or merged cells.**
   Splitting cells or merging cells in a data table disrupts the cells' association with their correct column headers. This will cause students using screen readers to become lost or confused when listening through your table data.

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CHECKPOINT 7: DATA TABLES

Yes/No	Are your Word tables:
	Created using the "Insert Table" function in Word? *A screen reader will not recognize "columns" created using tabs and spaces; the information will be a confusing jumble of data for a non-sighted student.*
	Formatted with Column headers to define the table structure? *Without proper headings, a screen reader has no means of identifying the context or meaning of the data in that Column or how it relates to other data in the table.*
	Simple grids, with no merged or split cells? *Can you easily navigate through the table by tabbing through cell by cell, left to right?* *Maintain a clear relationship with the column headers and the data cells and avoid splitting or merging cells within the table.*
	Clearly and concisely described using ALT Text? *Provide a brief description of the purpose of the table so that students understand what the purpose of the table is before they begin listening to the data it contains.*

REFERENCES & RESOURCES

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OTHER GUIDES IN THE *CHECKPOINTS* SERIES

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Accessibility Checkpoints for Word Documents | Sue Doner, eLearning (CETL) | Camosun College | 2014; 2023
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