# Disability Visibility: Making Inaccessible Digital Learning Materials Visible

bit.ly/AccessibilityCCLI

Bridgid Fennell, MLIS, M.Ed.
California Conference on Library Instruction 2025

# Alice Wong

The Disability Visibility Project is an online community dedicated to creating, sharing, and amplifying disability media and culture.


Wong, A. (2020). *Disability visibility: First-person stories from the twenty-first century*. Vintage Books, a division of Penguin Random House LLC.

Wong, A. (2022). *Year of the tiger: An activist's life*. Vintage Books, a division of Penguin Random House LLC.

Wong, A. (2024). *Disability intimacy: Essays on love, care, and desire* (1st ed.). Knopf Doubleday Publishing Group.

By John D. and Catherine T. MacArthur Foundation -, CC BY 4.0

Do not edit
How to change the design

# What do you find frustrating when it comes to making digital content accessible?

Presenting with animations, GIFs or speaker notes? Enable our Chrome extension

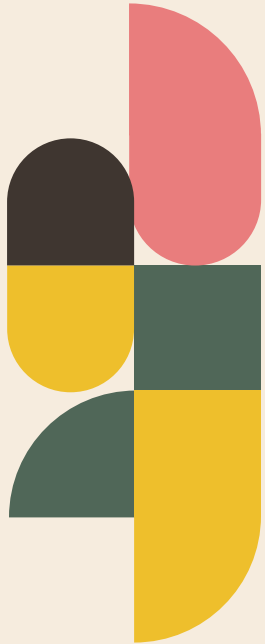
slido

# Objectives

01 Differentiate between alt text, long descriptions, and decorative images

02 Produce alt text and long descriptions for images

03 Assign a heading structure to a document



# US Disability Legislation

**1973**
Rehabilitation Act of 1973 Section 504

**1990**
Americans with Disabilities Act

**1998**
Section 508 Rehabilitation Act of 1973

**2026**
ADA Title II Updates

Association of Research Libraries. (2024). ADA Title II regulations: Implications for libraries.

01

# Alt Text

WCAG 2.1 Success Criterion 1.1.1 Non-text Content (Level A)

All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for [some exceptions].

# Alt text demonstration

ATRC CSU. (2021, September 20). Screen Reader: Image without Alt Text [Video]. YouTube. (32 seconds)

# DoIt Center Screen Reader Video

DoIt Center (2017, October 3). Using a Screen Reader (Audio Described). YouTube (7 minutes)

# What is alt text and why is it important?

## Alternative text (alt text)

- Used for images, pictures, illustrations, infographics, and diagrams
- Assistive technology
    - People who use screen readers
      WebAIM Screen Reader User Survey
        - Refreshable braille display
- Low internet bandwidth
- Improves SEO

Andreas Nylin's Image Alt Text Viewer

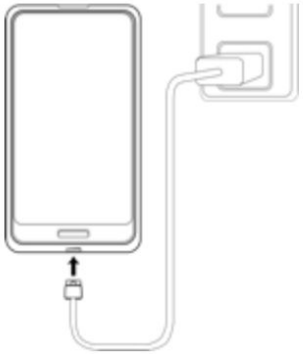
# Alt text decision tree

Alt Text: What to Write from Norman Nielsen Group

See also WebAIM's An alt Decision Tree

# Use alt text to convey important information

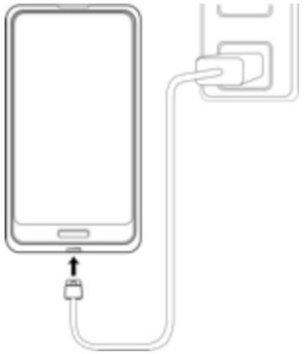
**Uninformative**



Charging the phone: Connect the phone to a power outlet using the cable and power adaptor provided.

**Alternative text for image**: "Charging phone"

**Informative**



Charging the phone: Connect the phone to a power outlet using the cable and power adaptor provided.

**Alternative text for image**: "Plug cable into the bottom edge of the phone."

*Alternative text is usually not visible; it is included in this example just so you can see what it is.*

Writing for Web Accessibility by W3C

# Alternative text guidelines

- All images need alt text.
- Include relevant content provided by the image, rather than simply describing how the image looks.
- Do not include extra or unnecessary information.
- Do not start with “image of” or “picture of”.
- Avoid images with text, but if necessary only include words in the image in the alt text.
- Be concise, 125-150 characters or under is ideal.
- Use proper capitalization and punctuation. End alt text with appropriate punctuation.
- Alt text must be in the same language as the main content.
- Do not stuff alt text with keywords to promote search engine optimization (SEO).

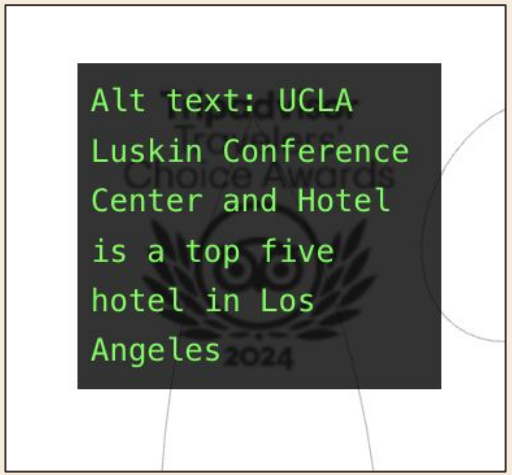
# Logos

## Do

Only include the words in the image

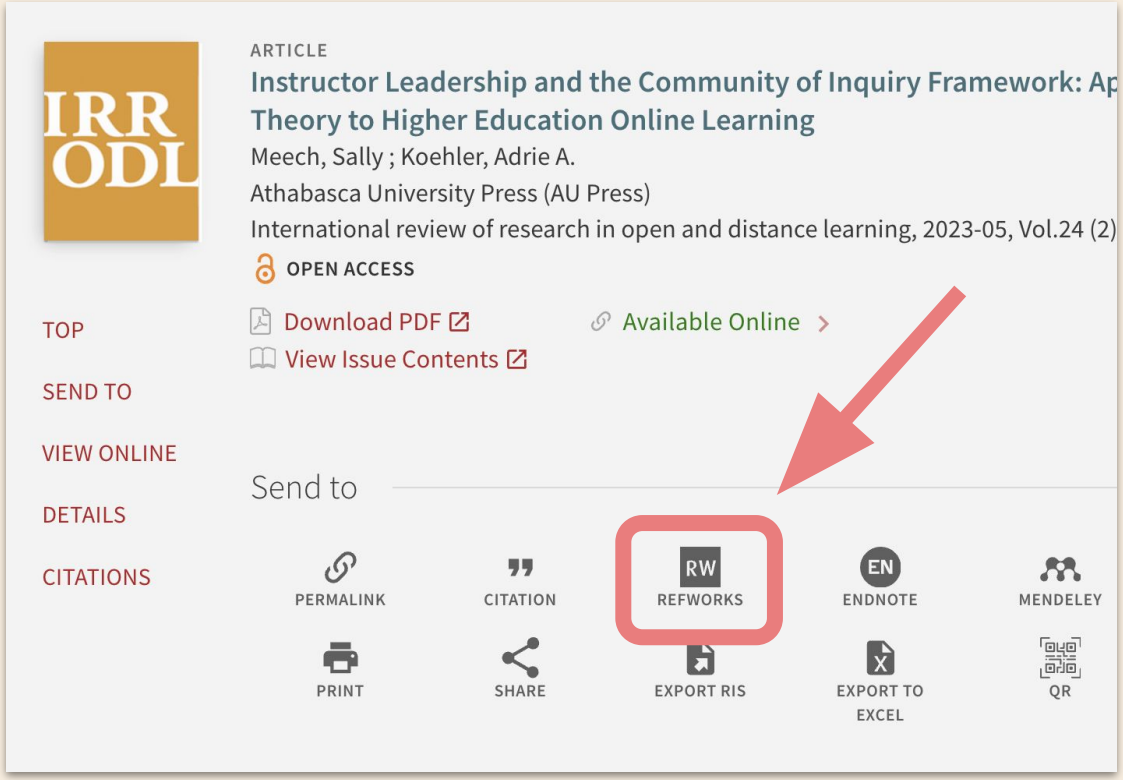
## Don't

Write alt text that does not reflect the words in the image



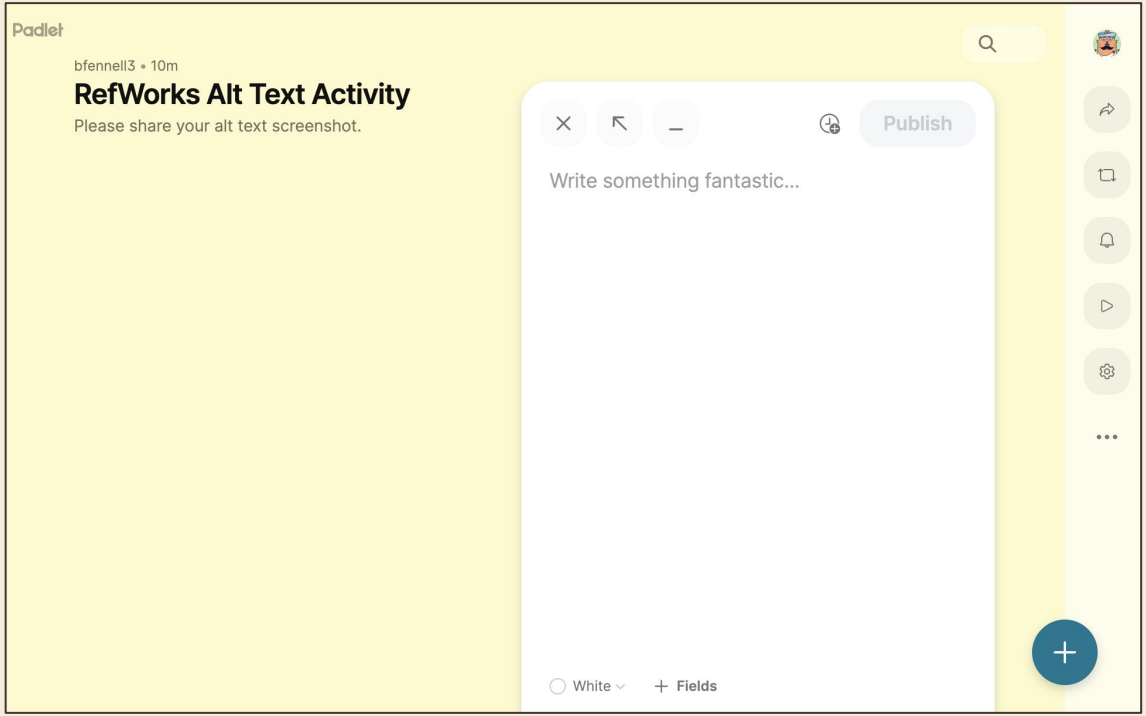
# Let's practice

How would you write alt text for this image? Share your answer in our RefWorks Alt Text Activity Padlet. https://bit.ly/4joYh2Z



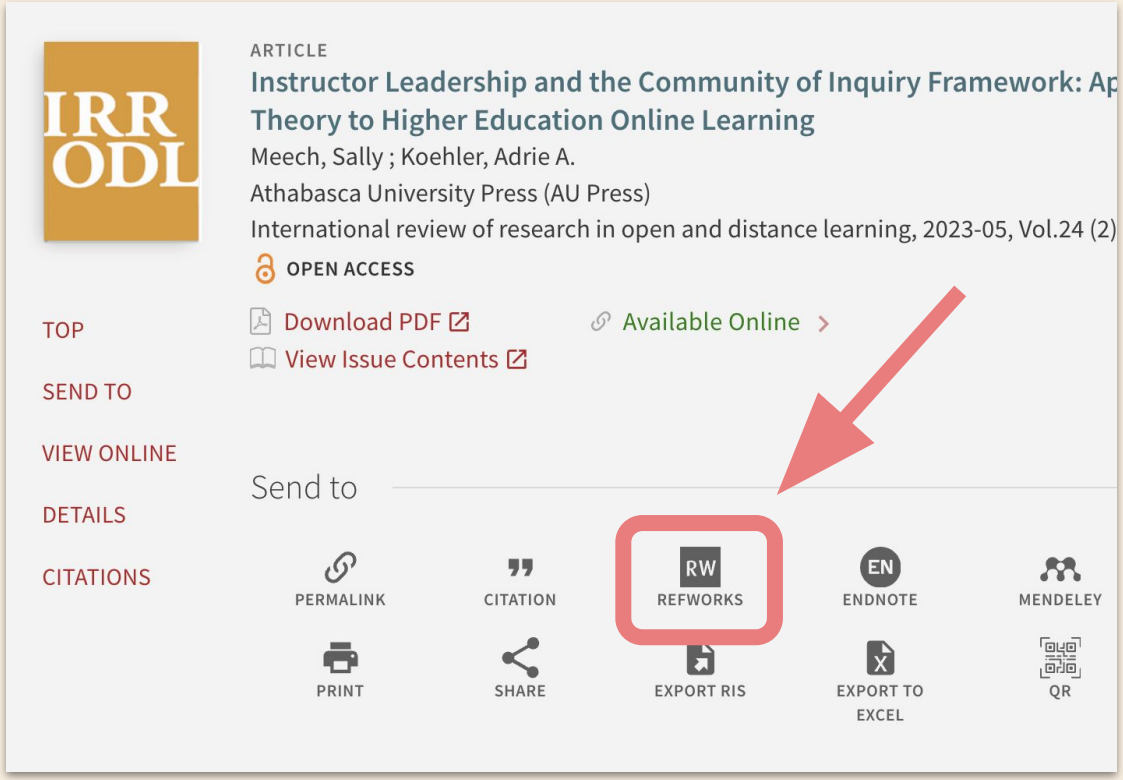
# Padlet

1. Activate the QR code or visit the RefWorks Alt Text Activity Padlet or https://bit.ly/4joYh2Z
2. Click on the plus sign in the lower right corner.
3. A white “pad” will appear.
4. Write your answer in the pad and click on “Publish” to share with the group.



# My alt text

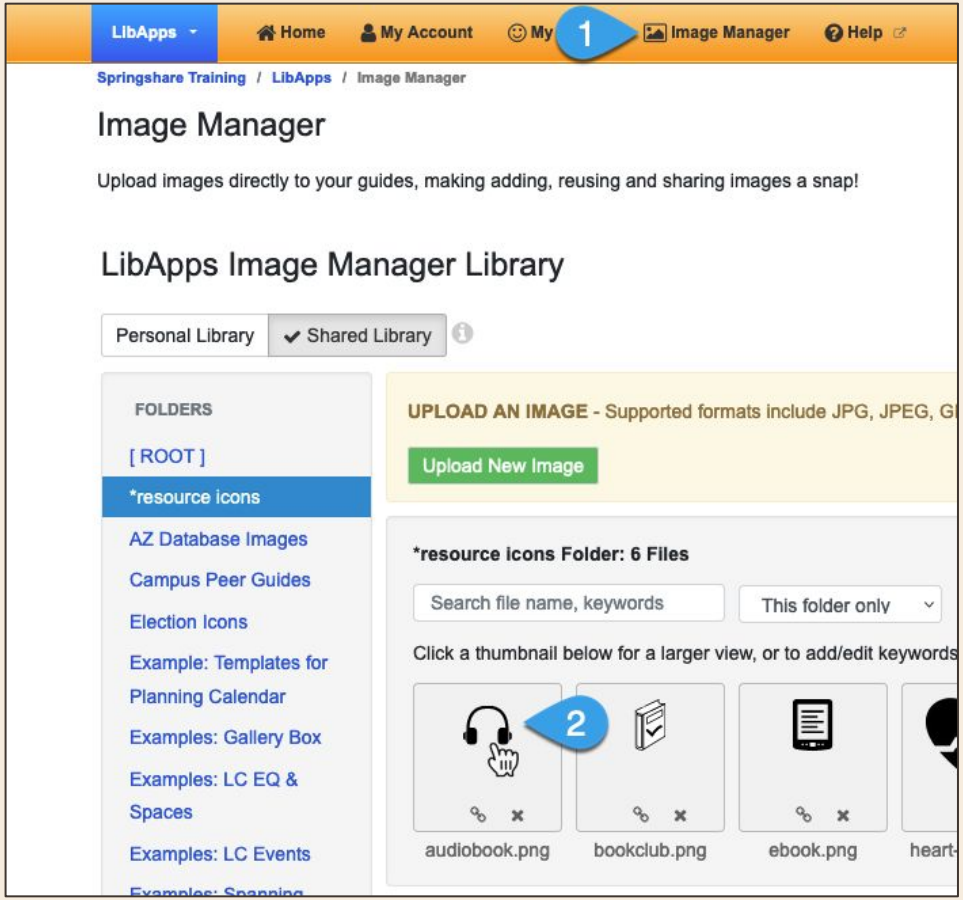
RefWorks icon is listed under Send to in the USC Libraries Catalog record for a journal article.



# Add Alt Text to LibGuides Part 1

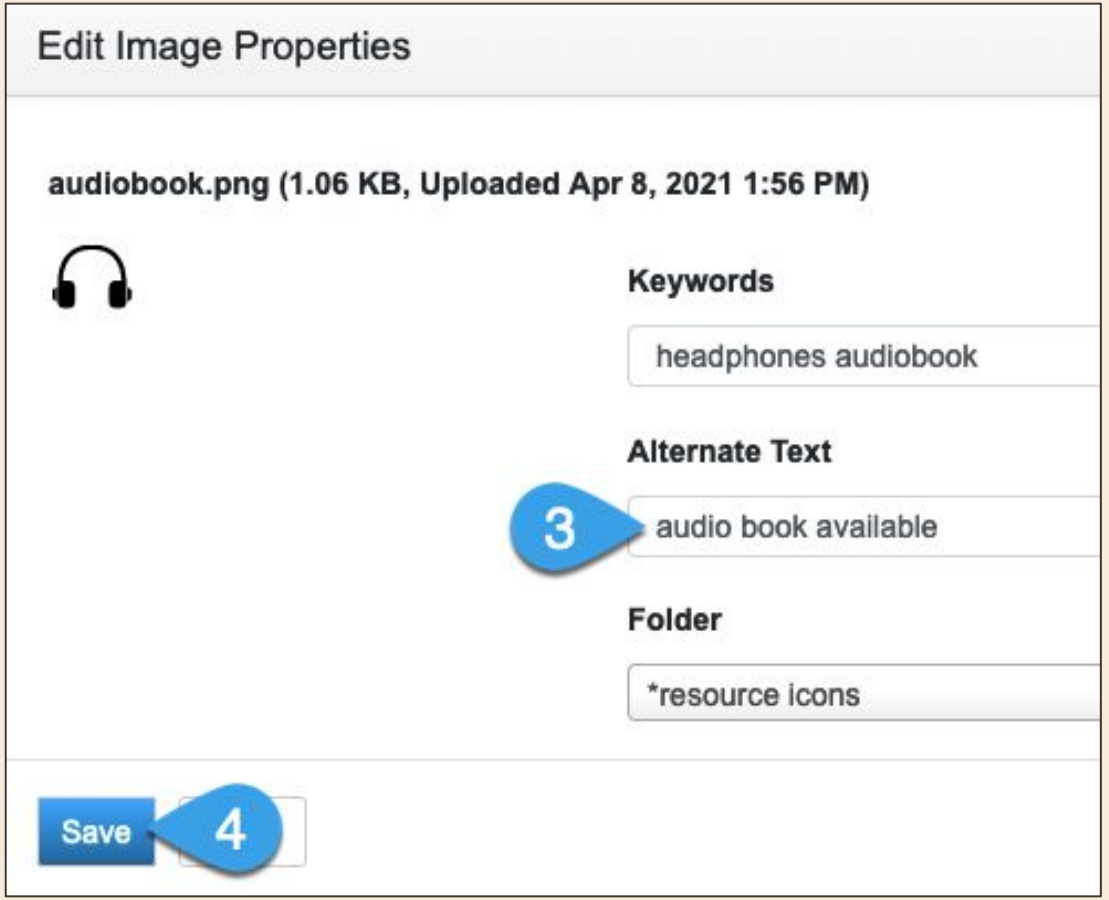
To add default alternate text to an image:

1. From your LibApps dashboard, click on the Image Manager link on the command bar.
2. Click on the thumbnail of the image you want to edit.



# Add Alt Text to LibGuides Part 2

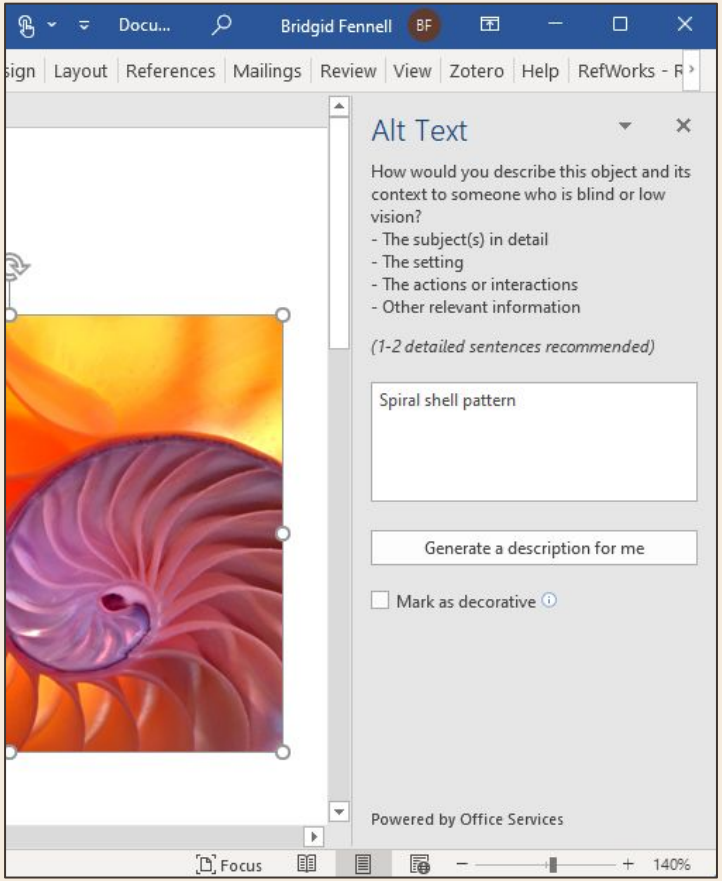
1. In the Edit Image Properties modal, enter your descriptive text into the Alternative Text field. This will appear in the image's alt attribute (e.g. <img alt="Your alternate text displays here">).
2. Click the Save button.



# Add Alt Text to Word Document

Microsoft Support: Add alternative text to a shape, picture, chart, SmartArt graphic, or other object

- Do one of the following:
  - Right-click the object and select Edit Alt Text.
  - Select the object and then select the format menu for the object, for example, Picture Format. Select Alt Text.
- In the Alt Text pane, type 1-2 sentences in the text box to describe the object and its context to someone who cannot see it.

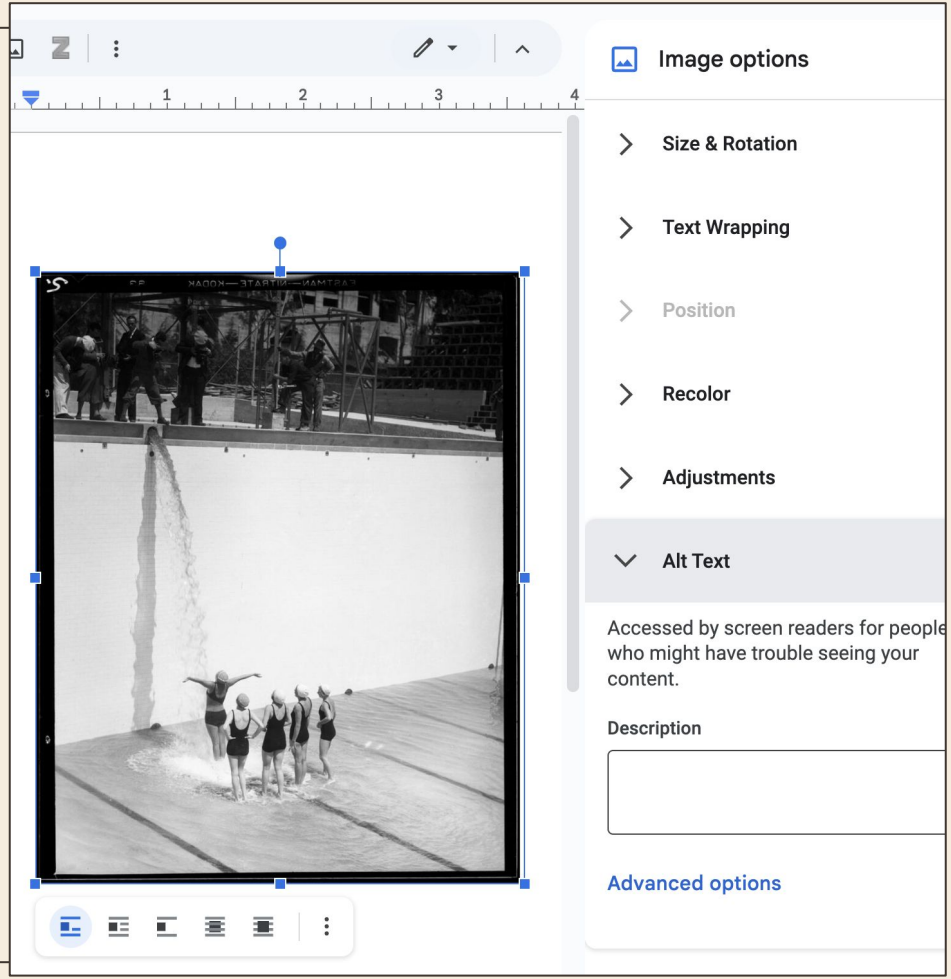


# Add Alt Text to Google Docs

Google Support: Make your document, presentation, sheets & videos more accessible

In Google docs either right click on the image to access the image options menu, Add alt text in the description field.

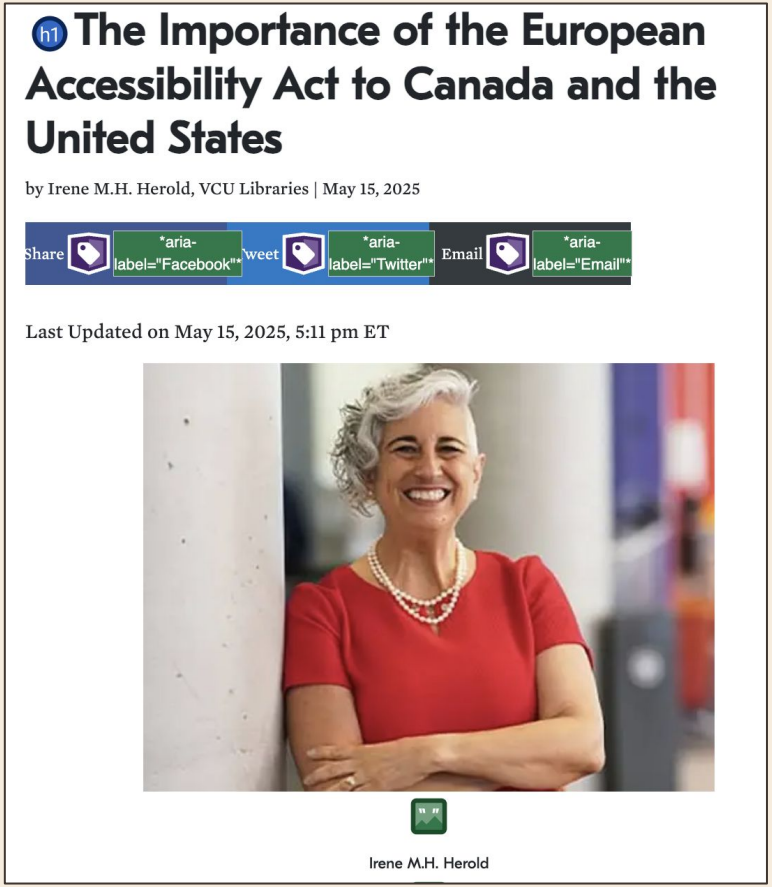
Alternatively, select the image, then navigate to the Format menu and select Image and then Options to add an alt text description.



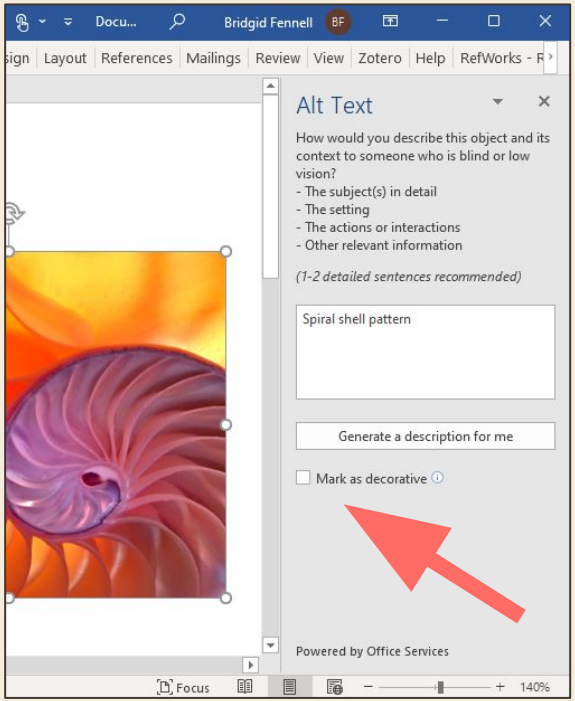
# Decorative Images

- Purely decorative image
- Does not contribute meaning to the information
- Null alt text, HTML code alt=" "
- Actively enter an empty “space” or mark as decorative
- Some rich content editors allow you to check a decorative image box

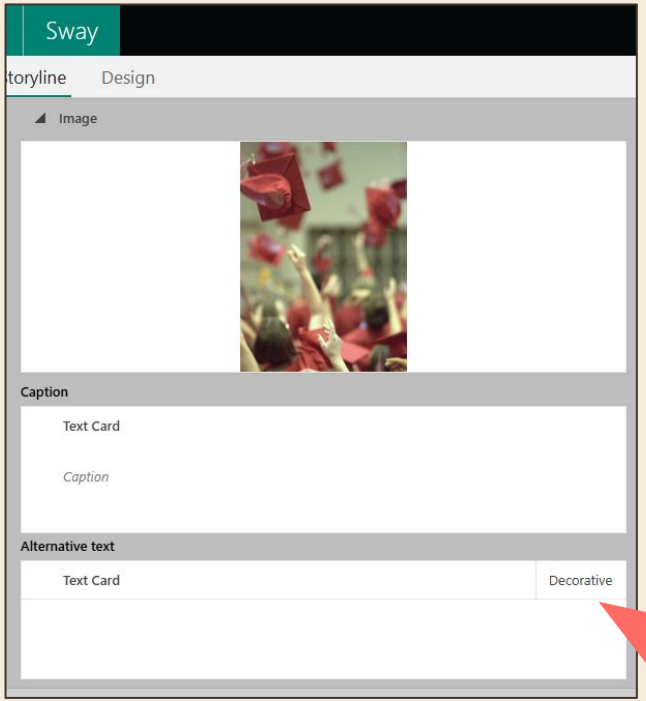
WAVE Web Accessibility Evaluation Tools



# Decorative Images in Rich Content Editors

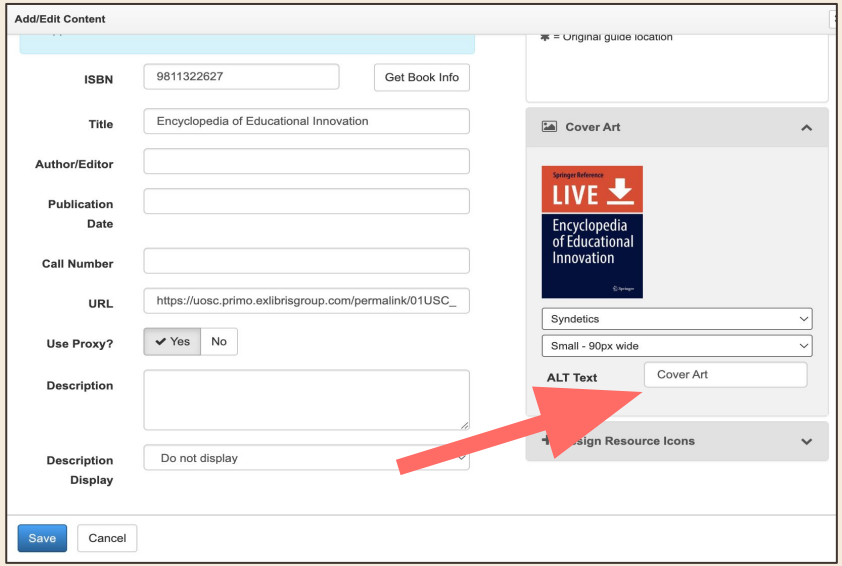


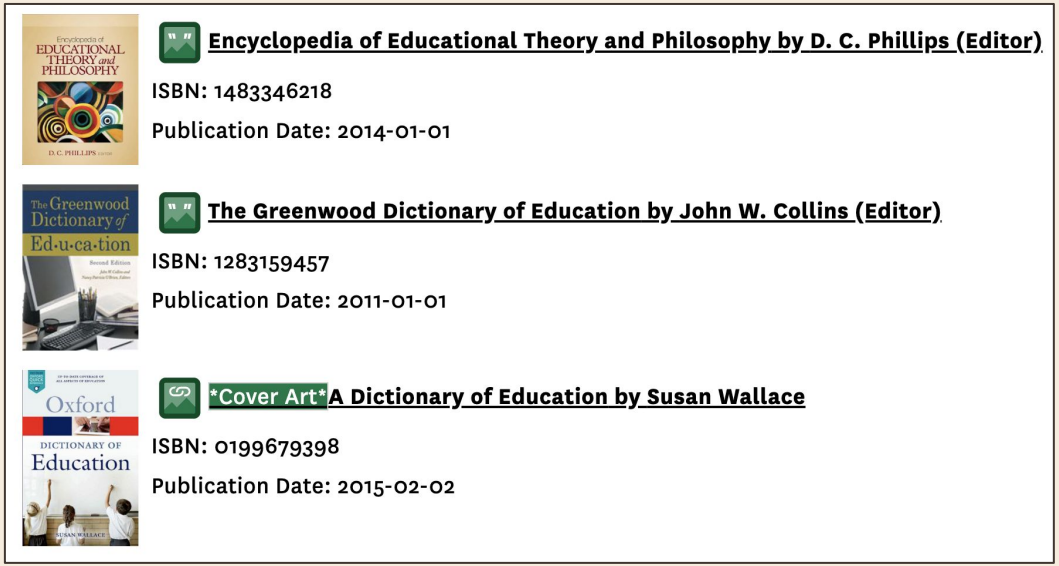

Microsoft Word




Microsoft Sway

# Cover Art in LibGuides




Syndetics provides generic alt text called Cover Art which isn't helpful.

Using the null alt text attribute, assistive technology will ignore the image.

02

# Long Description

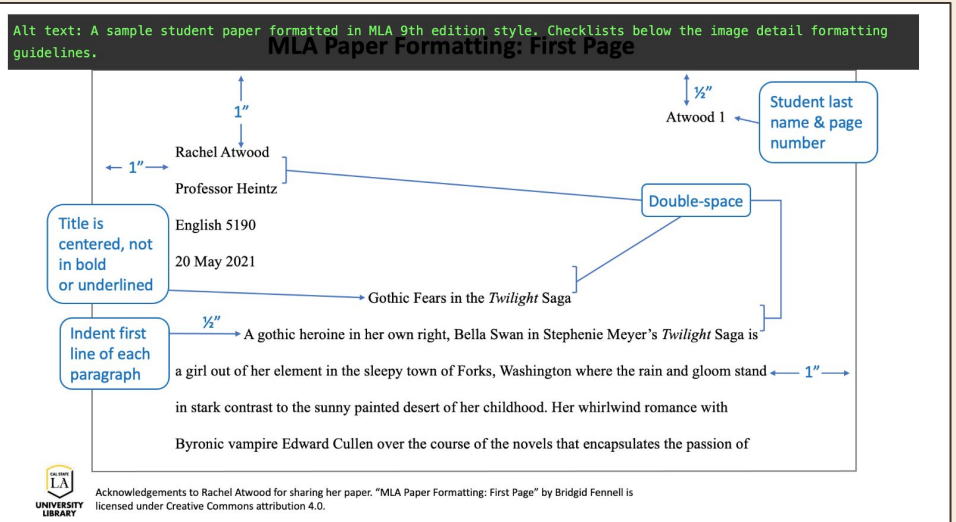
WCAG 2.1 Success Criterion 1.1.1 Non-text Content (Level A)

All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for [some exceptions].

# Provide Context in Document

- Write brief alt text and indicate where reader can find detailed informative explanation.
- Include narrative description of image in the text of the document
- Universal Design for Learning

Alt text: A sample student paper formatted in MLA 9th edition style. Checklists below the image detail formatting guidelines.




Acknowledgements to Rachel Atwood for sharing her paper. "MLA Paper Formatting: First Page" by Bridgid Fennell is licensed under Creative Commons attribution 4.0.

**Formatting checklist:**

- Use 1" margins at the top, bottom, left, and right sides of the page.
- Right-align the running head at the top of every page, include your last name and page numbers.
- Use a readable typeface like Times New Roman in 11-13 points.
- Align the text at the left margin only.
- Double-space the entire paper, including quotations, notes, and the list of works cited.
- Indent .5" from the left margin at beginning of each paragraph.
- Leave one space not two after a period or other concluding punctuation.

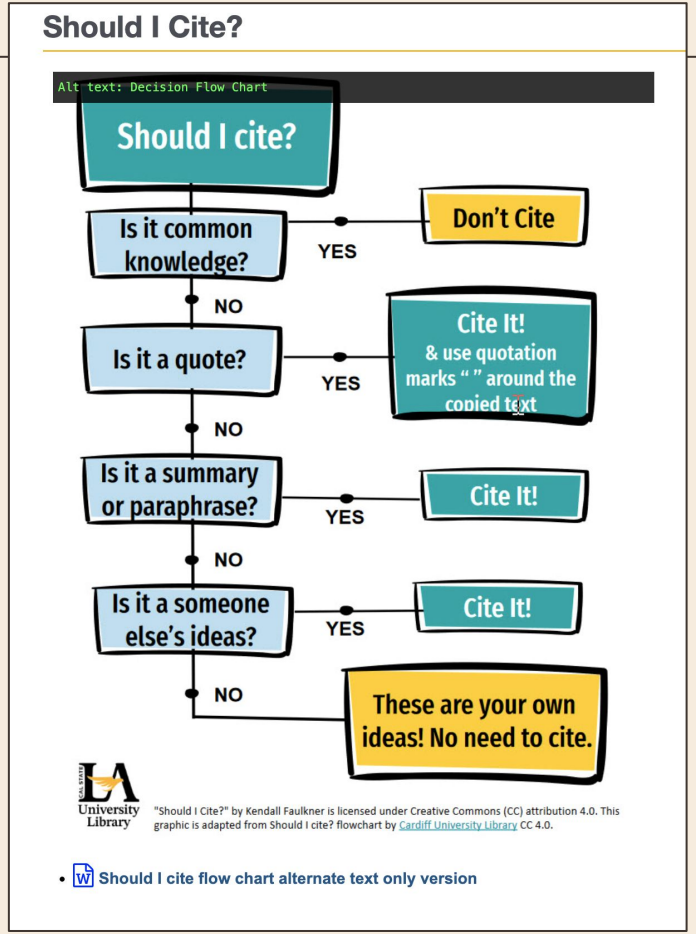
**Title formatting:**

- In the top left write your name, instructor's name, course, and date (Day Month Year with no commas ie. 3 January 2023). Start a new line for each item.
- Double-space between the date and the title.
- The title is centered with no bold, underlining, quotation marks, or end punctuation marks.

https://libguides.calstatela.edu/WriteAndCite/MLA

# Provide Supplementary Document

- Write brief alt text and indicate where reader can find detailed informative explanation.
- Include accessible text version




Cal State LA Library Should I Cite?

# Accessible Online Documents

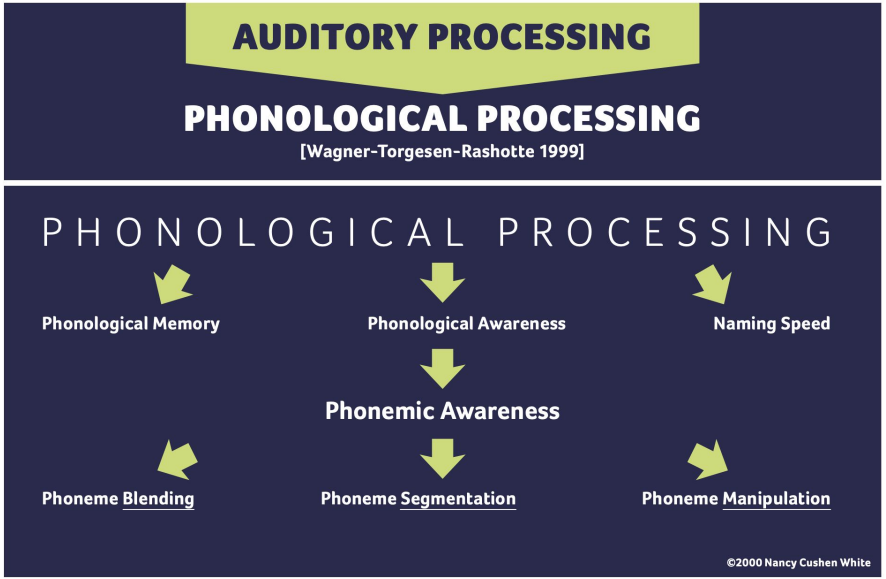



**Figure 3.1.** The elements of phonological processing. Developed by Nancy Cushen White and used with permission.

Long Description for Figure 3.1

California Dyslexia Guidelines. (2017). California Department of Education.

**Figure 3.1. The elements of phonological processing.**

The figure shows the relationship between the elements of phonological processing. At the top "Auditory Processing" is listed. "Phonological Processing" appears below as a subtype of "Auditory Processing." The three components of "Phonological Processing" are listed as "Phonological Memory," "Phonological Awareness," and "Naming Speed." "Phonemic Awareness" appears as a key subset of "Phonological Awareness." "Phoneme Blending," "Phoneme Segmentation," and "Phoneme Manipulation" are listed as three Phonemic Awareness skills.

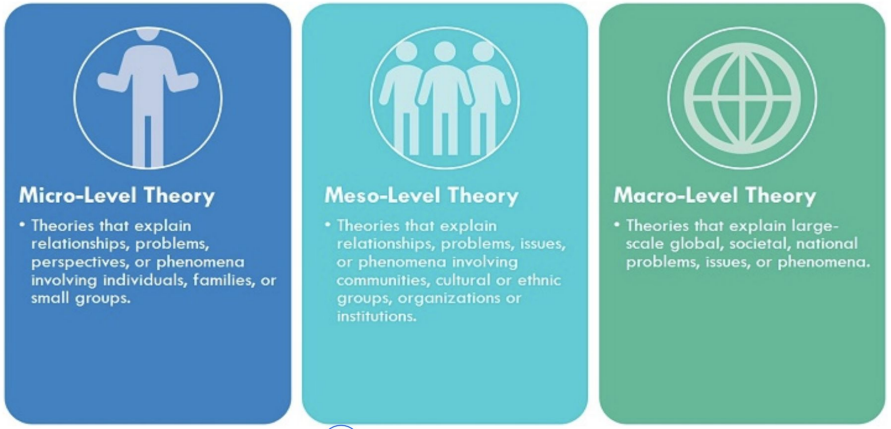
Developed by Nancy Cushen White and used with permission.

Return to figure 3.1.

# Long Description in S

Salmons, J. (2022). Research skills: Defining terms within theory. In SAGE Skills: Student Success. https://doi.org/10.4135/9781071881835

*Figure 1. Theory by Scope*




Download Image as .jpg

Long Description

As Figure 1 indicates, a macro-level theory looks at relationships of large-scale issues or problems

The figure shows three tables, namely, the Micro-Level Theory, the Meso-Level Theory, and the Macro-Level Theory. The Micro-Level Theory reads, Theories that explain relationships, problems, perspectives, or phenomena involving individuals, families, or small groups. The Meso-Level Theory reads, Theories that explain relationships, problems, issues, or phenomena involving communities, cultural or ethical groups, organizations or institutions. The Macro-Level Theory reads, Theories that explain large-scale global, societal, national problems, issues, or phenomena.

Close Window

03

# Headings and Structure

WCAG 2.1 Success Criterion 2.4.10 Section Headings (Level AAA)

Section headings are used to organize the content.

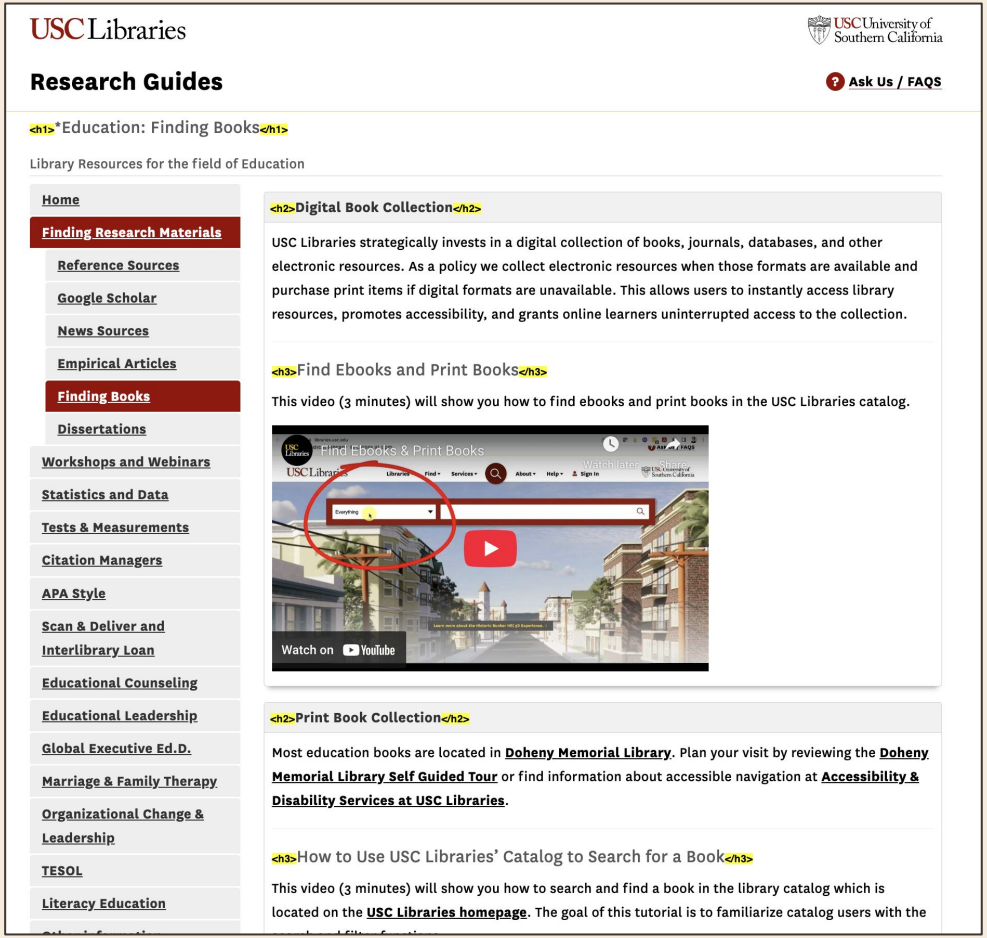
# Headings demonstration

ATRC CSU. (2021, September 20). Screen Reader: Document Without Headings [Video]. YouTube. (1 minute)

# Headings Best Practices

- Use levels in hierarchical and chronological order <h1> through <h6>
- Don’t skip levels.
- Use <h1> only once per webpage.
- In long documents more than one <h1> is acceptable.
- Be succinct and descriptive.
- Do not use visual formatting like bold, underlining, or changing font size instead of a heading structure.

[Paul J. Adam’s JavaScript Bookmarklets for Accessibility Testing]



# Headings knowledge check

## Which statement is true?

A. Use a bold font to create headings in a document.

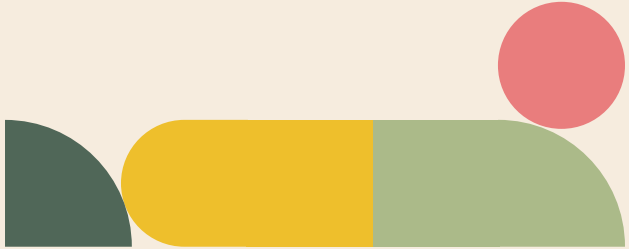
B. Headings organize document content for sighted, blind, and low-vision readers.

C. Headings provide HTML code so screen reader users can efficiently navigate a digital document.

## True or False?

Headings can be used in any order.

Answer: False, use headings in a hierarchical and chronological order <h1> through <h6>.

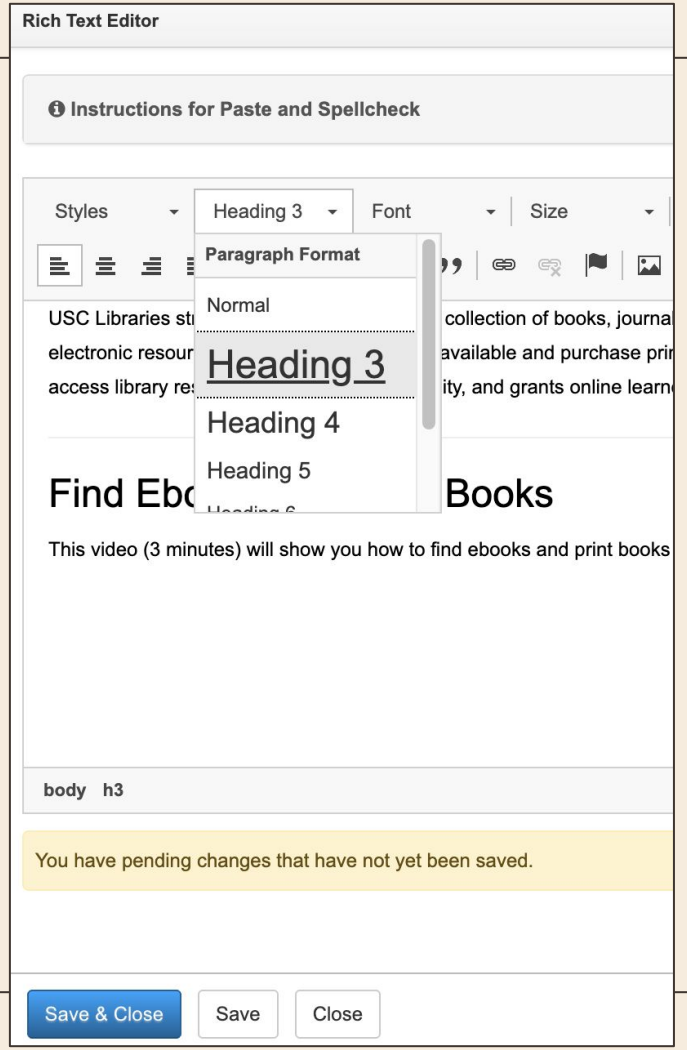


# Guided Activity

1. Visit https://bit.ly/ActivityCCLI to access a read-only version of this document. Make a copy to your Google Drive.
2. Read the text. Determine where to assign Level 1 and Level 2 headings. On the paper, mark where you will assign headings.
3. We will work together through guided practice to assign headings.

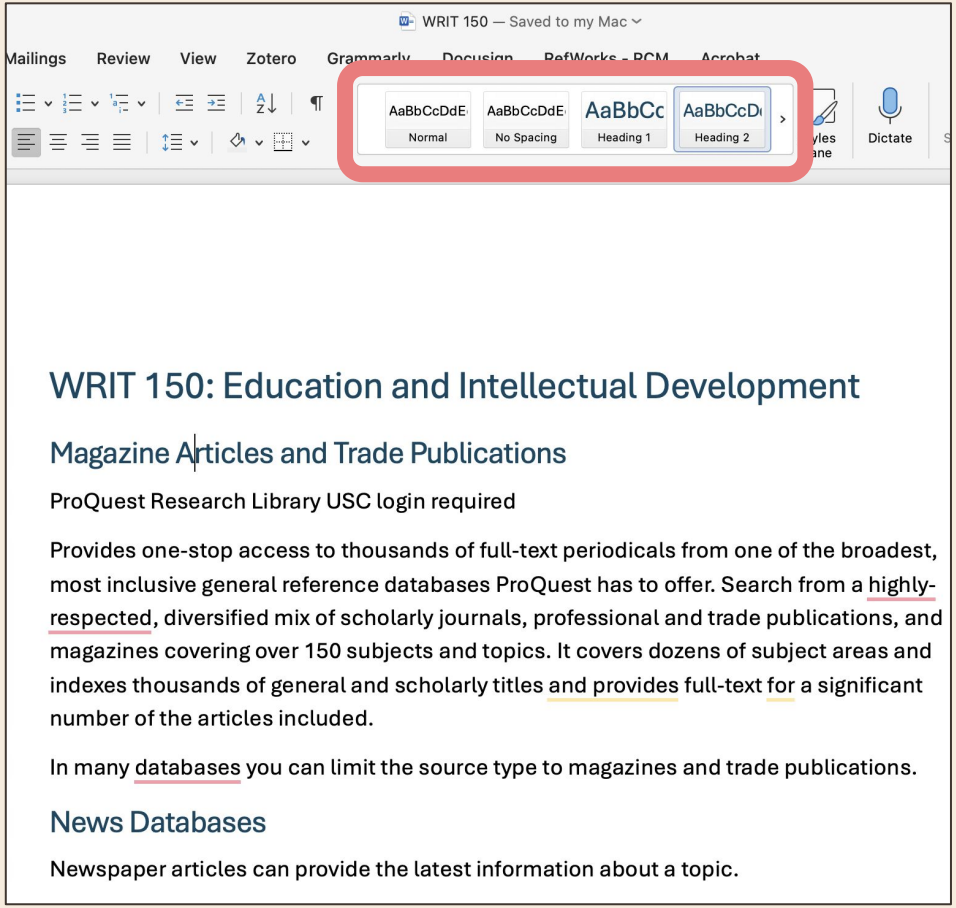
# Assign Headings in LibGuides

- Open the Rich Text Editor
- Highlight text to be formatted with a heading level
- Navigate to “Paragraph Format”
- Select the heading level
- Don’t forget to “Save and Close”



# Assign Headings in Word

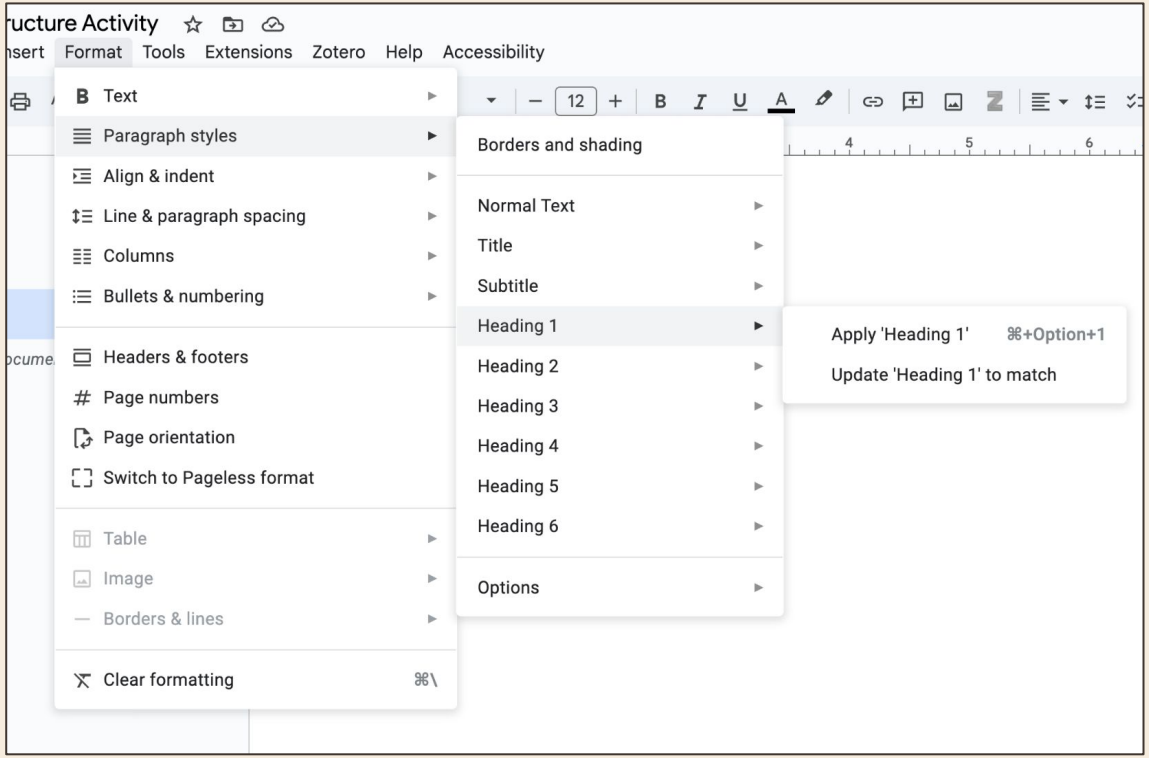
- Select the text you want to use as a heading.
- On the Home tab, move the pointer over different headings in the Styles gallery. Notice as you pause over each style, your text will change so you can see how it will look in your document. Select the heading style you want to use.
- Add a heading in a Word document video and instruction for Windows and Mac.



# Headings in Google Docs

Google Support Add a title, heading, or table of contents in a document

1. Click on the Format menu
2. Select Paragraph styles
3. Select the desired heading level to apply to text
4. Update will change the style of the heading



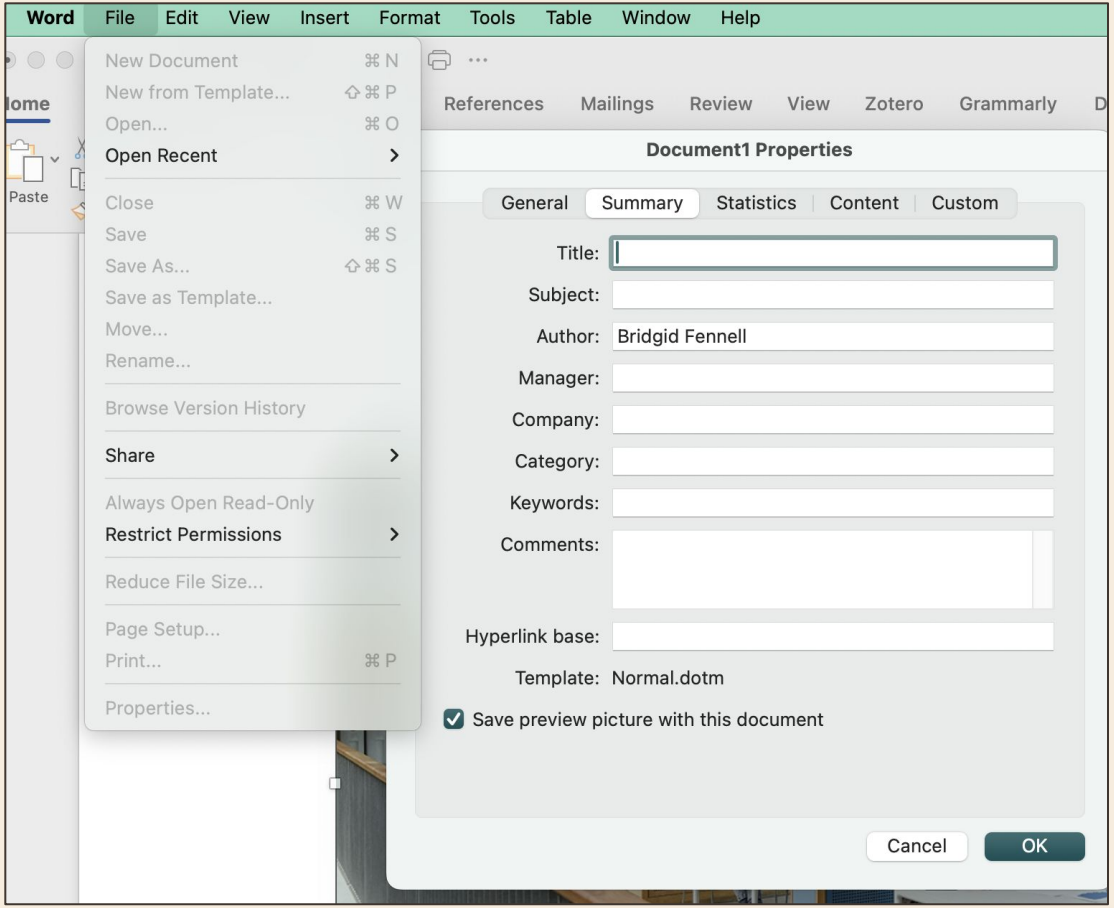
# Accessible Titles

The “title” heading level In Word in not accessible to assistive technology.

To add a title to a Microsoft Word or PowerPoint file, navigate to File > Properties > Summary to enter the document title.

In Google Docs, use the field located in the upper left corner of the document window. By default, new documents are assigned the title “Untitled document”.

See Titles at the University of Washington for more information.



# Structure in Slide Decks

## Microsoft PowerPoint

- Get accessible templates for Office
- Make slides easier to read by using the Reading Order pane
- WebAim PowerPoint Accessibility
- Create Accessible Presentations

## Google Slides

- Create Accessible Google Slides Harvard University Digital Accessibility
- Grackle Slides accessibility checker

# Listen to Stevie Wonder

Slate. (2018, June 18). Stevie Wonder Braille Award [Video]. YouTube.

Do not edit
How to change the design

# What is one thing you learned in this workshop that surprised you?

Presenting with animations, GIFs or speaker notes? Enable our Chrome extension

slido

# Thanks!

Please take a few minutes to complete the **exit survey**

Do you have any questions?
bfennell@usc.edu

**CREDITS:** This presentation template was created by **Slidesgo**, and includes icons by **Flaticon**, and infographics & images by **Freepik**

# Articles


Liu, Y. Q., Bielefield, A., & Beckwith, J. (2024). ADA digital accessibility on academic library websites. *College & Research Libraries*, *85*(2), Article 2. https://doi.org/10.5860/crl.85.2.166

Lomax, B. (2024, November 1). 10 Tips toward Accessibility. American Libraries Magazine. https://americanlibrariesmagazine.org/2024/11/01/10-tips-toward-accessibility/

Miller, M., & Parogni, I. (2022, February 18). The hidden image descriptions making the internet accessible. The New York Times.

Wentz, B., Gorham, U., & Jaeger, P. T. (2023). Academic libraries and their legal obligation for content accessibility. First Monday. https://doi.org/10.5210/fm.v28i1.12892

# Resources

Training

- University of Michigan Self-Paced BTAA Cultivating Belonging: Library Accessibility Essentials
- College/university compliance trainings and centers for teaching excellence

LibGuide Accessibility

- University of Tennessee Knoxville Library
- Harvard LibGuides Best Practices
- NYU LibGuide Accessibility

Accessibility Communities

- WAVE Web Accessibility Evaluation Tools
- Educause IT Accessibility Community Group
- Accessibility Summer Camp June 13, 2025 $15, ASC YouTube Channel
- Axe-Con from Deque Systems Deque Systems YouTube Channel