

Maine CITE welcomes you to today's webinar!

Creating Accessible Digital Content and Presentations

The webinar will begin soon.

Lani Carlson, Maine CITE
December 10, 2025



Serving all ages and all abilities!

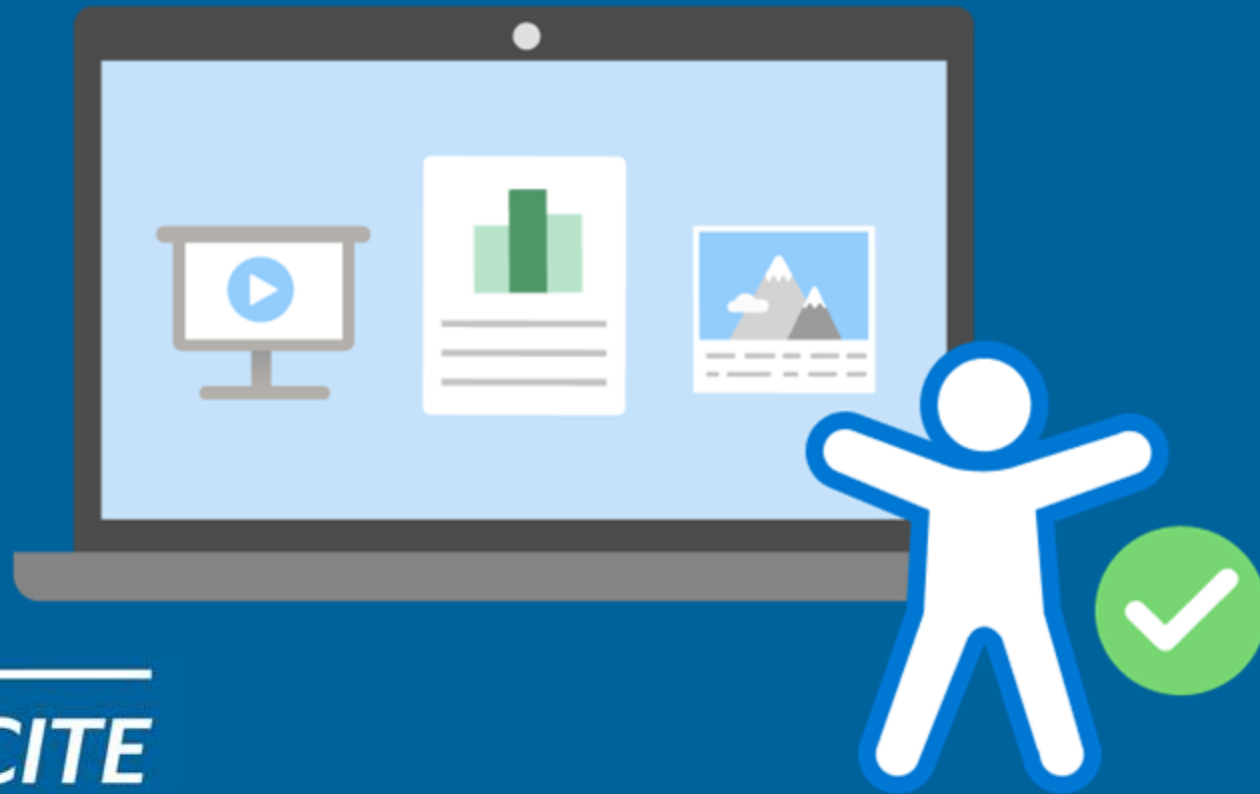
Maine CITE and partners provide:

- Information and assistance
- Assistive technology training
- Device demonstrations
- Device short-term loans
- Device reuse

Partners include:

- Spurwink ALLTECH
- Pine Tree Society
- Gallant Therapy Services
- John F Murphy Homes
- University of Maine
Farmington

Creating Accessible Digital Content and Presentations



Accessibility



Information Must Be Understandable

- Know your audience
- Shorter sentences, smaller words



Color Contrast

Color contrast is the difference between two colors that makes it easy to see one thing from another.



Color contrast

Color contrast

Color contrast



Color contrast

Color contrast

Color contrast



Color Contrast

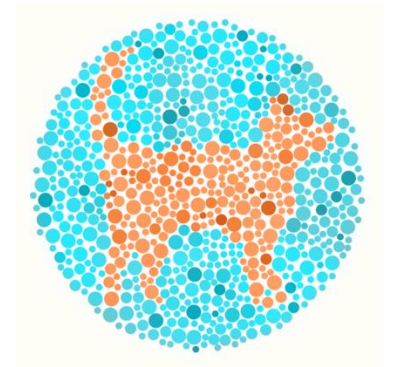
Color Contrast

Color Contrast Checker

Everybody sees color differently.

Website Content Accessibility Guidelines (WCAG)

- Minimum contrast ratios for regular and large font sizes
- webaim.org/standards/wcag/



TPGi Colour Contrast Analyser

tpgi.com/color-contrast-checker/



Colour Contrast Analyser (CCA)

Foreground colour (black)

HEX

Background colour (white)

HEX

RGB HSL HSV

☐ Synchronize colour values

Red 255

Green 255

Blue 255

▼ **Sample preview**

example text showing contrast

WCAG 2.1 results Contrast ratio 21:1

▶ **1.4.3 Contrast (Minimum) (AA)**

✓ Pass (regular text) ✓ Pass (large text)

▶ **1.4.6 Contrast (Enhanced) (AAA)**

✓ Pass (regular text) ✓ Pass (large text)

▶ **1.4.11 Non-text Contrast (AA)**

✓ Pass (UI components and graphical objects)

Color Contrast Analyzer

WCAG 2.1 Minimum contrast ratio:

- 4.5 : 1 for “regular” text
- 3:1 for large text (18 pt)

WCAG 2.1 results

Contrast ratio
21:1

▼ 1.4.3 Contrast (Minimum) (AA)

Paraphrased

Text (including images of text) has a contrast ratio of at least **4.5:1** for "regular"; sized text and at least **3:1** for large scale text (at least **18pt** / **24px**, or bold and at least **14pt** / **18.5px**), unless the text is purely decorative.

✓ Pass (regular text)

✓ Pass (large text)

Colour Contrast Analyser (CCA)

Foreground colour (black)

HEX **#000000**

Background colour (white)

HEX **#FFFFFF**

RGBHSLHSV

☐ Synchronize colour values

Red

Green

Blue

255

255

255

▼ Sample preview

example text showing contrast

WCAG 2.1 results

Contrast ratio
21:1

▶ 1.4.3 Contrast (Minimum) (AA)

✓ Pass (regular text)

✓ Pass (large text)

▶ 1.4.6 Contrast (Enhanced) (AAA)

✓ Pass (regular text)

✓ Pass (large text)

▶ 1.4.11 Non-text Contrast (AA)

✓ Pass (UI components and graphical objects)

 **Maine CITE**

Color Contrast Analyzer (CCA)

Minimum contrast ratio 4.5 : 1 “regular” sized text

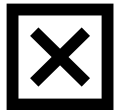
✓			
✓	5.2 : 1 Ratio	21 : 1 Ratio	4.5 : 1 Ratio ✓
✗	1.8 : 1 Ratio	19.4 : 1 Ratio	1.4 : 1 Ratio ✗
✗	1.4 : 1 Ratio	21 : 1 Ratio	

TPIg CCA



WCAG 2.1 Minimum contrast ratio:

- 4.5 : 1 for “regular” text
- 3:1 for large text (18 pt)



1.4 : 1 Ratio

Foreground colour (red)

HEX

Background colour

HEX

RGB HSL HSV

☐ Synchronize colour values

Red 6

Green 176

Blue 80

▼ Sample preview

example text showing contrast

WCAG 2.1 results Contrast ratio 1.4:1

▶ 1.4.3 Contrast (Minimum) (AA)

✗ Fail (regular text) ✗ Fail (large text)

▶ 1.4.6 Contrast (Enhanced) (AAA)

✗ Fail (regular text) ✗ Fail (large text)

▶ 1.4.11 Non-text Contrast (AA)

✗ Fail (UI components and graphical objects)

Keep It Simple



1:12 men are color blind.



1:12 men are color blind.



Navigation



Headings

- Documents: Headings
- PPT Presentations: Reading Order

The College Application Process

Choose Desired Colleges

Visit and evaluate college campuses

Visit and evaluate college websites

Look for interesting classes

Note important statistics

Student/faculty ratio

Retention rate

Prepare Application

Write Personal Statement

Choose interesting topic

Describe an influential person in your life

Favorite high school teacher

Grandparent

Include important personal details

Volunteer work

Participate in varsity sports

Review personal statement

Compile resume

Reading Order (PPT)

Title

Information Must Be Understandable

Text box

- Know your audience
- Shorter sentences, smaller words

Image



How a Screen Reader Works

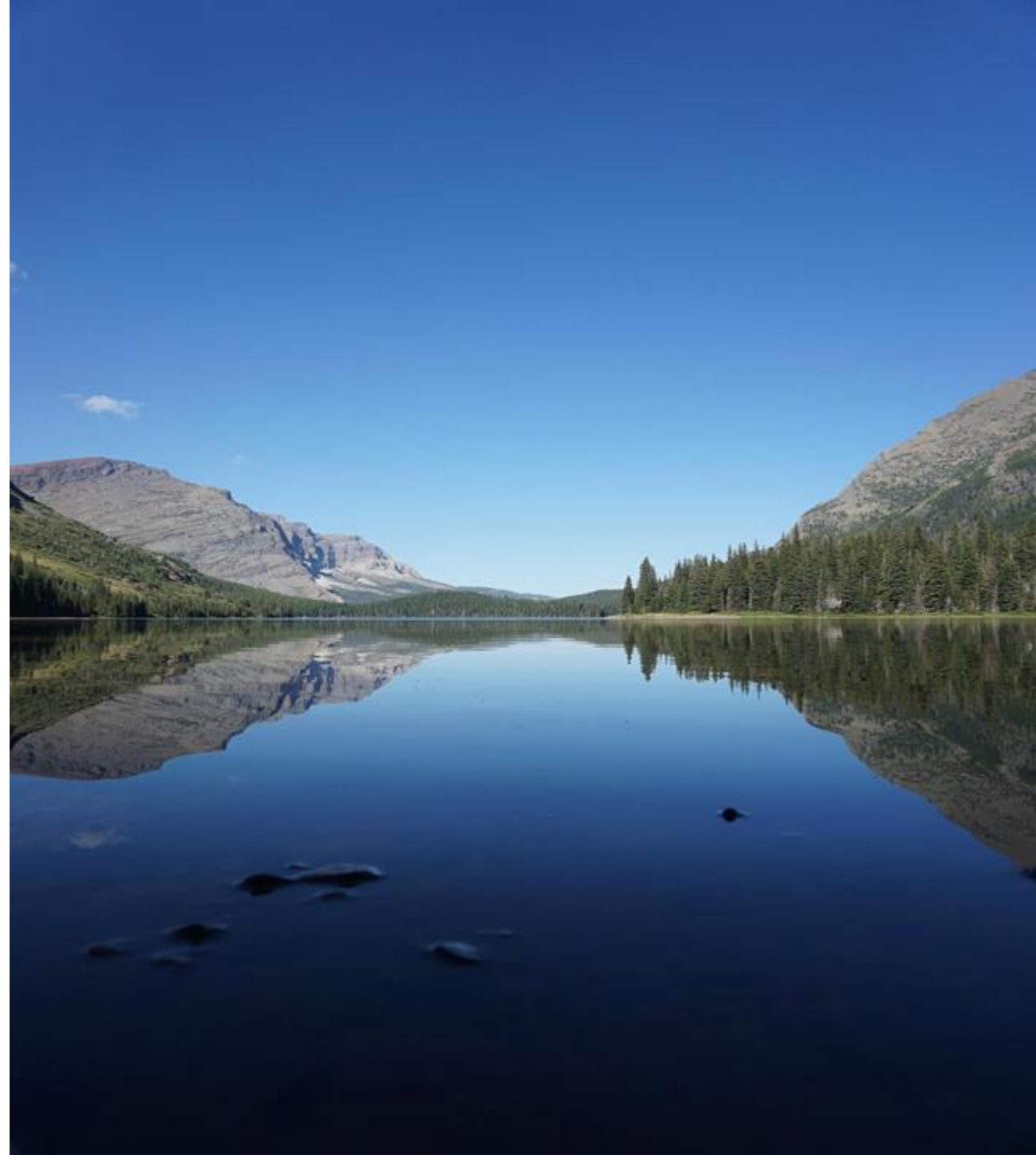
Reading a Document

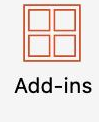
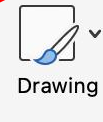
tinyurl.com/4s2tesmn

Tufts | Technology Services
UNIVERSITY

Reading Order

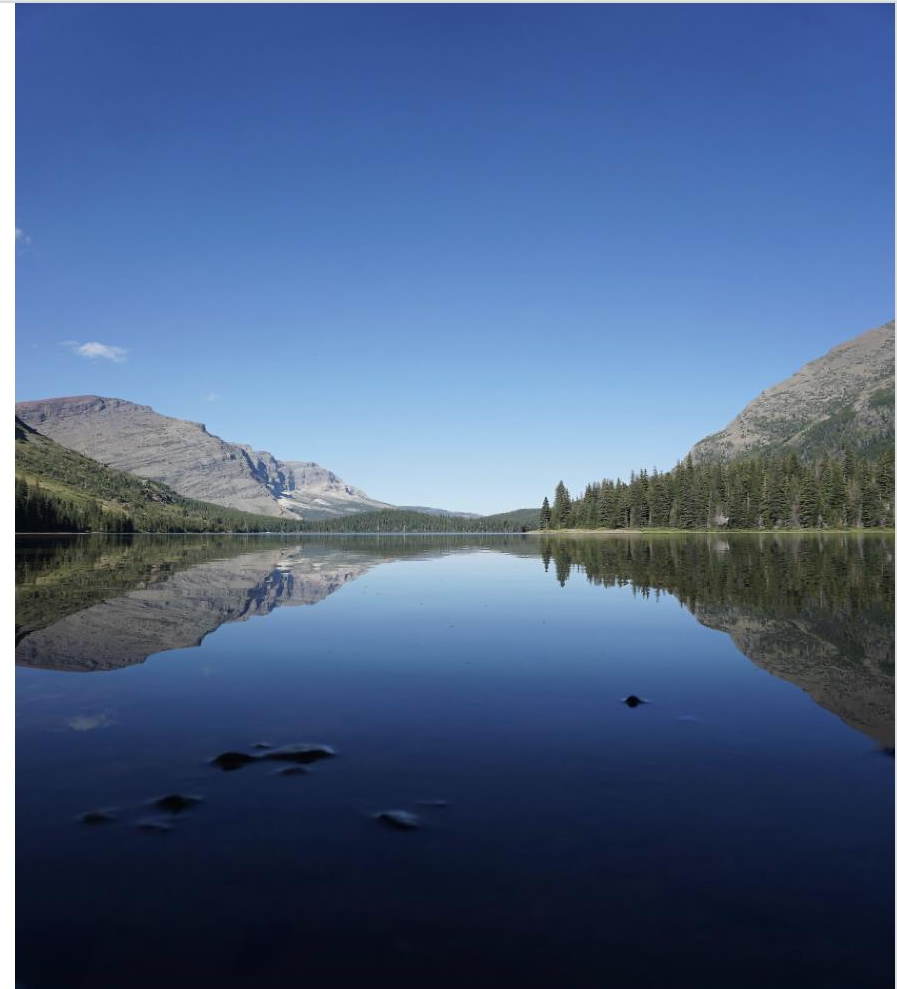
- Provides navigation
- Elements are 'layers'





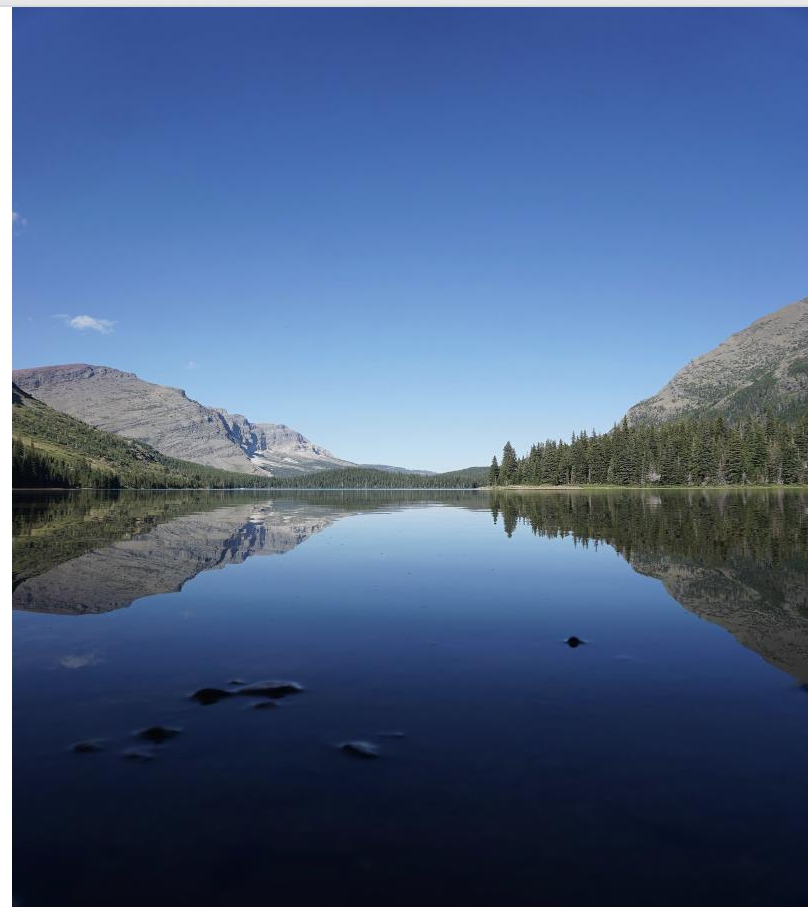
Reading Order

- Provides navigation
- Elements are 'layers'

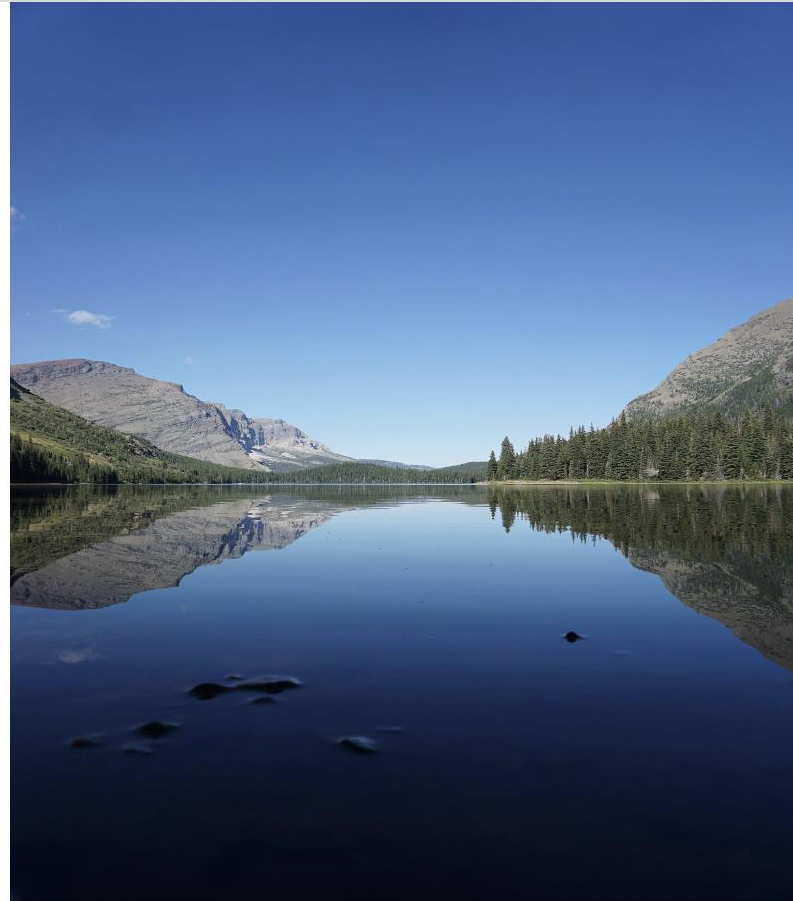


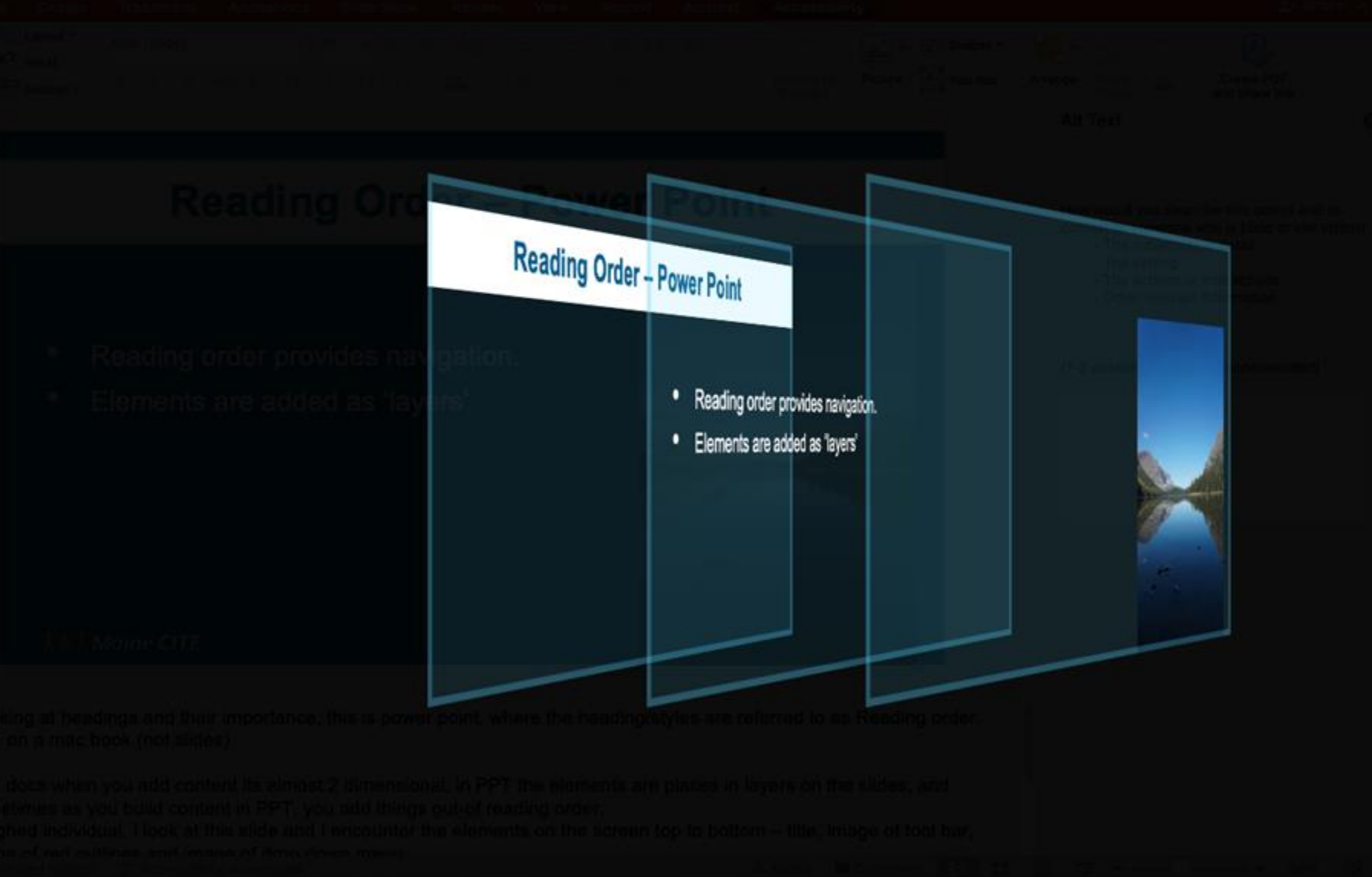
Reading Order

- Provides navigation
- Elements are 'layers'



- Provides navigation
- Elements are 'layers'





Looking at headings and their importance, this is power point, where the headings/styles are referred to as Reading order.
on a mac book (not slides):

When you add content its almost 2 dimensional, in PPT the elements are placed in layers on the slides, and
elements as you build content in PPT, you add things out-of-reading order.
When individual, I look at this slide and I encounter the elements on the screen top-to bottom -- title, image of tool bar,
the content, the footer, and the status bar. I don't see the elements in the order they are added.



Use Your Tools

- Paragraphs
- Line spacing
- Page breaks

Inserting a Table

AutoSave ☐

Creating Accessible Content WORD

Search (Cmd + Ctrl + U)

Home

Insert

Draw

Design

Layout

References

Mailings

Review

View

Developer

Acrobat

Table Design

Table Layout

Paste

Arial

12

Aa

B

I

U

x_2

x^2

AaBbCcDdEe

Normal

AaBbCcDdEe

No Spacing

Dictate

Sensitivity

Add-ins

Editor

Create PDF and share link

Request Signatures

Comments

Editing

Share

The screenshot shows the Microsoft Word ribbon with the 'Table Design' tab selected. The 'Table Style Options' group on the left includes 'Header Row' and 'Banded Rows' checked. The 'Table Styles' group in the center displays various table templates. The 'Borders' group on the right includes 'Shading' and 'Border Styles'.

Table Layout

AutoSave ...

Creating Accessible Content WORD

Search (Cmd + Ctrl + U)

Home Insert Draw Design Layout References Mailings Review View Developer Acrobat Table Design **Table Layout**

Select Table

Draw Table Eraser Draw

Delete

Rows & Columns **Merge** AutoFit

Height: 0.13" Width: 1.07"

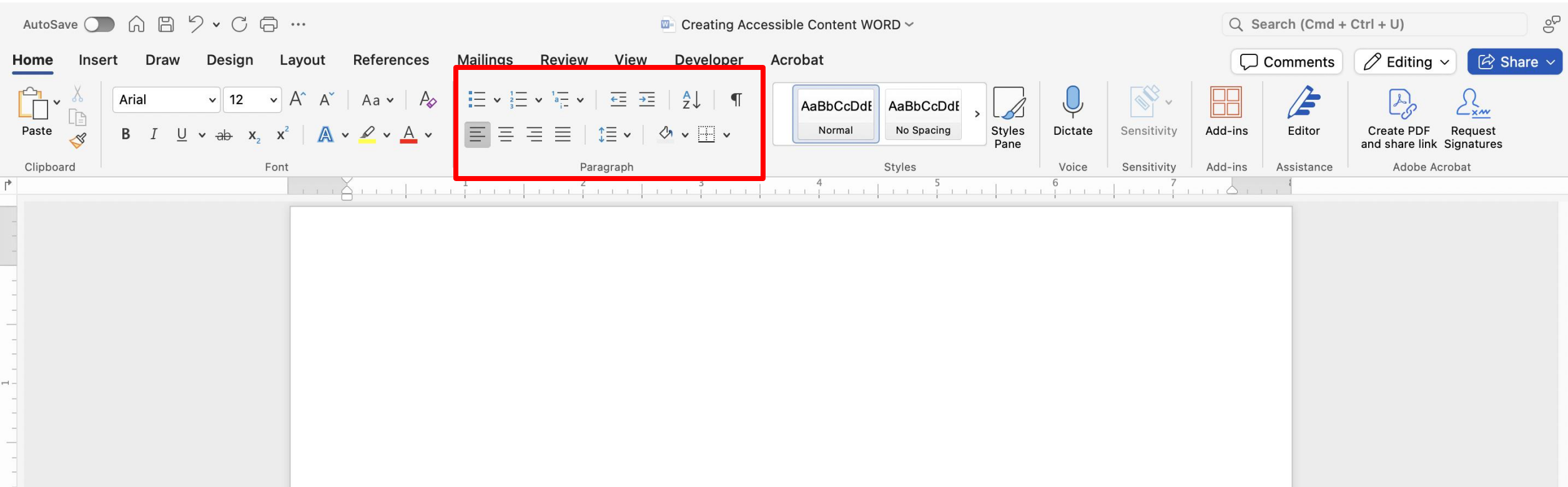
Cell Size Distribute Rows Distribute Columns

Alignment Text Direction Cell Margins

Data Sort Repeat Header Rows Convert to Text Formula

1 2

Lists



Creating Columns

The screenshot displays the Microsoft Word interface with the 'Layout' tab selected in the ribbon. The 'Columns' button in the 'Page Layout' group is highlighted with a red box. A dropdown menu is open, showing options: 'One', 'Two', 'Three', 'Left', 'Right', and 'More Columns...'. The 'More Columns...' option is also highlighted with a red box. The 'Columns' dialog box is open, showing the 'Presets' section with five icons: 'One', 'Two', 'Three', 'Left', and 'Right'. The 'Manual' section is also visible, with 'Number of columns' set to 1 and 'Width and Spacing' options. The 'Apply to' dropdown is set to 'Selected text'. The 'OK' button is highlighted in blue.

AutoSave ☐ Home Insert Draw Design **Layout** References Mailings Review View Developer Acrobat

Margins Orientation Size **Columns** Line Numbers

One Two Three Left Right More Columns...

Columns

Presets

One Two Three Left Right

Manual

Number of columns: 1 ☐ Line between

Width and Spacing

Col #: Width: Spacing:

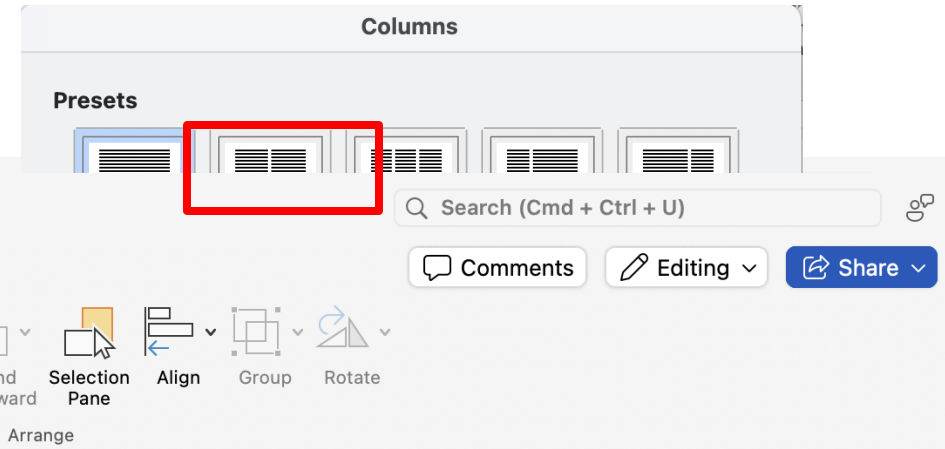
1: 7.5"

☒ Equal column width

Apply to: Selected text

Cancel OK

Formatting Columns



Accessibility Checker

Most of Microsoft's tools have a built-in accessibility checker. Be advised: no accessibility checker is perfect, and you should always review your content in addition to using one. These checkers will produce a list of

errors, warnings, and tips. Errors must be fixed to ensure accessibility. Warnings should be checked as these are often smaller errors that may not impede access but can cause problems. Tips are extra things you can do to increase accessibility.

To use the Accessibility Checker:

- Under the 'Review' menu, select 'Check Accessibility'
- Select 'Info'

Videos

Captions

All videos are required to be captioned. Most editing platforms/software have this capability. Free platforms, such as YouTube, allow you to upload your video and create or load captions to it. There is

Alternative Text (Alt text)

Alt text is needed to describe any non-text element that provides information to the user.

- An image conveys SIMPLE information
- A table conveys COMPLEX information
- A line that is purely DECORATIVE, not informative



Alt text should be short, accurate and equivalent

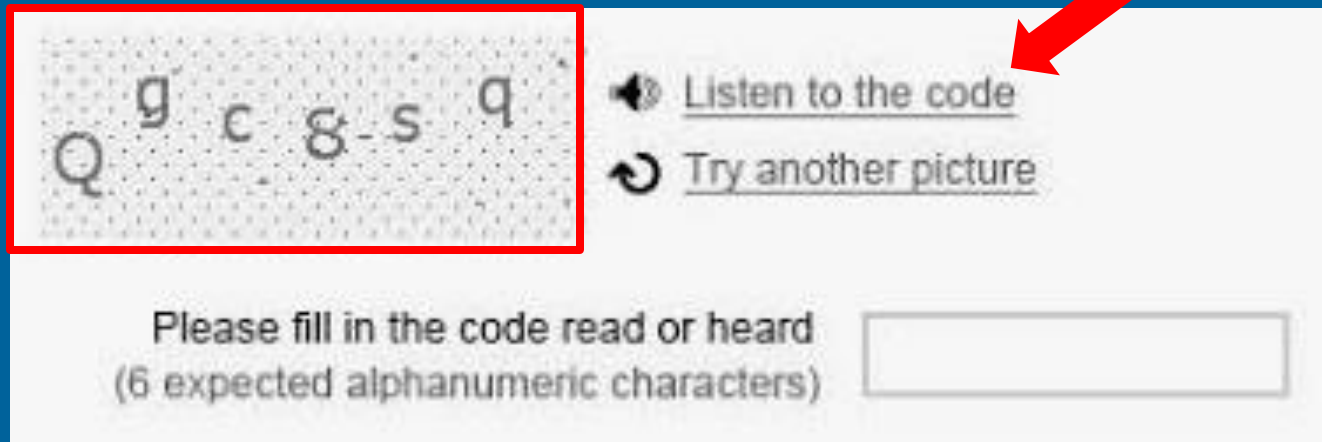
Alt Text with a Screen Reader

Screen reader test
Images with and without
alt attribute

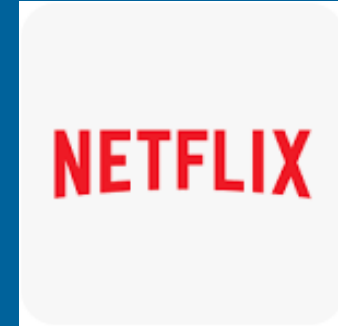
Alt Text

Other types of images

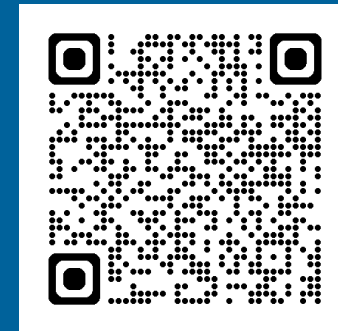
- CAPTCHAs
- Images of text
- Images as hyperlink



Alt text: Captcha image



Alt text: Netflix icon



Alt text: QR code to
www.maine cite.org

Content is Key

Glad you're all here!



Alt Text

How would you describe this object and its context to someone who is blind or low vision?

- The subject(s) in detail
- The setting
- The actions or interactions
- Other relevant information

(1-2 detailed sentences recommended)

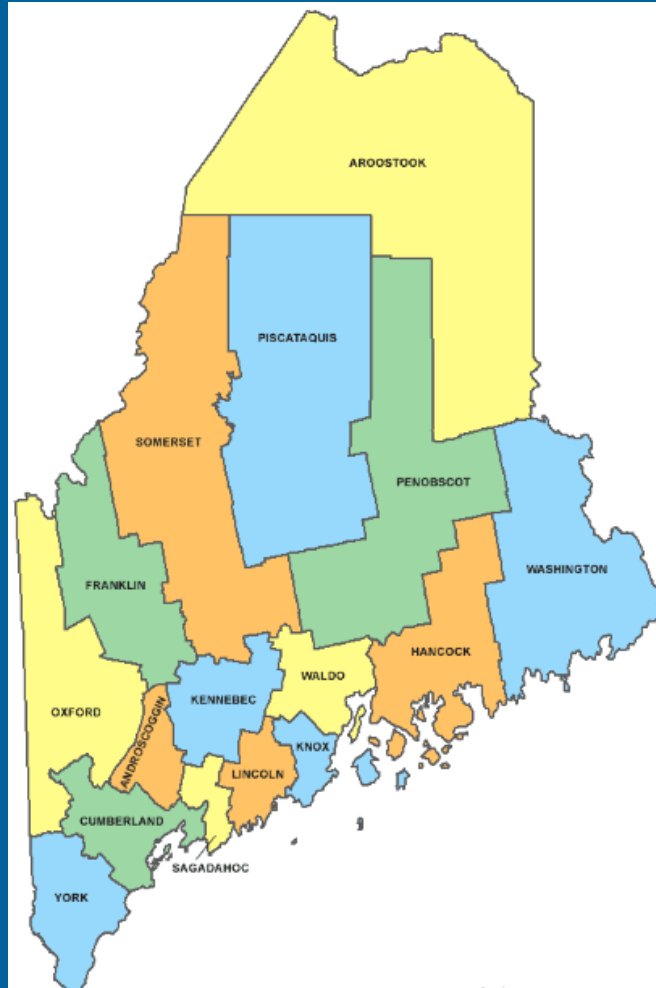
Emojis|

☐ Mark as decorative

Generate alt text for me

Do you need that image?

UMA student population



Alt Text

How would you describe this object and its context to someone who is blind or low vision?

- The subject(s) in detail
- The setting
- The actions or interactions
- Other relevant information

(1-2 detailed sentences recommended)

50% students from Piscataquis, Washington, Kennebec, Knox and York. 25% students from Franklin, Penobscot, and Cumberland. 15% students from Somerset, Hancock, Lincoln and Androscoggin. Less than 10% from Aroostook, Oxford, Waldo and Sagadahoc

☐ Mark as decorative

Generate alt text for me

Using Videos

All embedded media need captions or transcripts.

Captions should:

- Match the audio timing
- Be the same as the spoken words
- Be readily available



Audio Descriptions



Provides content to people who are blind and others who cannot see the video adequately.



webaim.org/techniques/captions/media/audiodesc.mp3



Audio Description Example



<https://www.youtube.com/watch?v=7-XOHN2BWG4>

Accessible Presentations

Content

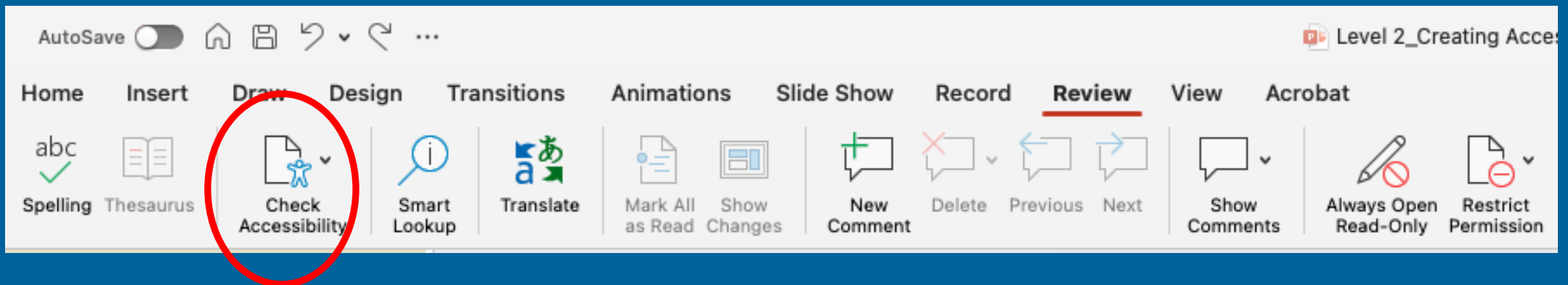
- Color contrast
- Reading order
- Alt Text
- Formatting



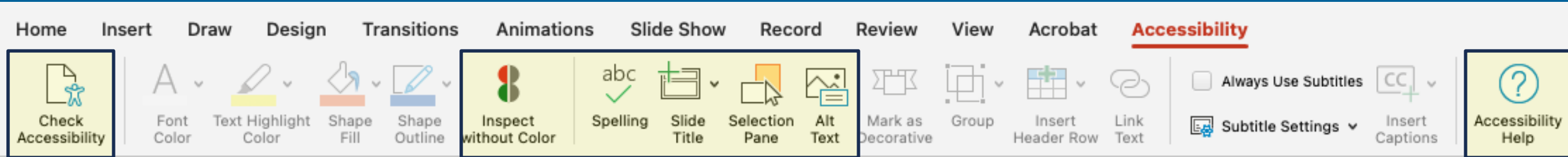
Accessibility Checker in PowerPoint:
Review > Check Accessibility

Accessibility Checker

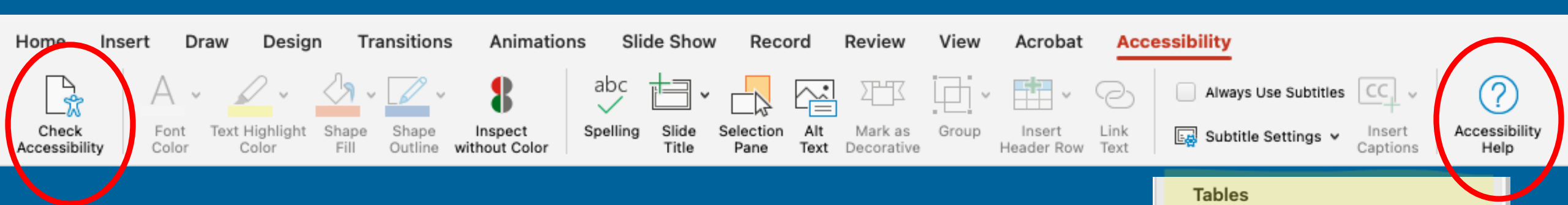
Review > Check Accessibility



Accessibility Checker- PPT



- Check Accessibility
- Inspect without color
- Spelling
- Slide Title
- Selection Pane
- Alt Text
- Accessibility Help



Accessibility Assistant Menu

- Color and Contrast
- Media and Illustrations
- Tables
- Document Structure
- Document Access

Accessibility Assistant [X]

Make your document inclusive

Fix these issues for a document that can be accessed by everyone, including the disability community.

Show only issues on current slide ☐

Color and Contrast

- Hard-to-read text contrast 7 >

Media and Illustrations

- Missing alt text 1 >
- Missing audio or video subtitles 3 >

Tables

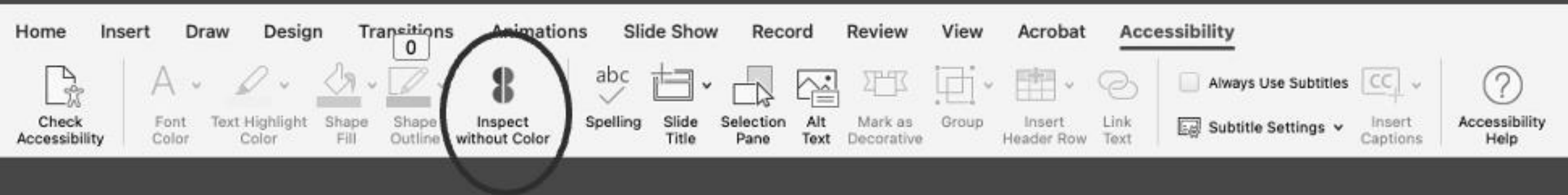
- Missing table header ✓ >
- Use of merged or split cells ✓ >

Document Structure

- Missing slide title ✓ >
- Duplicate slide title 1 >
- Check reading order 4 >
- Default section name ✓ >
- Duplicate section name ✓ >

Document Access

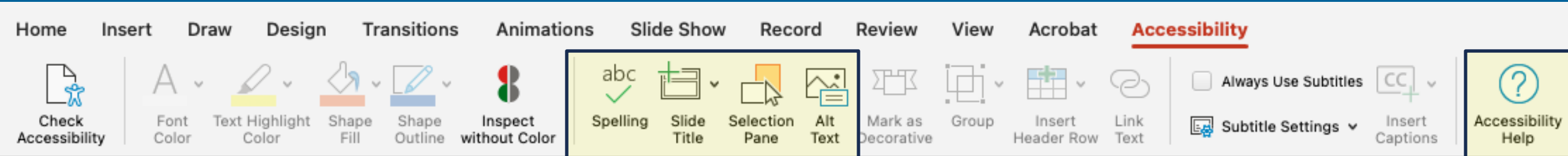
- Restricted access ✓ >



Inspect color contrast

- Low-vision
- Color blind
- Printed documents

Accessibility Checker Menu



- Spelling
- Slide Title
- Selection Pane
- Alt Text
- Accessibility Help

Accessibility Checkers are NOT Perfect

Some items may require manual checking:

- Color contrast
- Information provided in color
- Bullet and numbered lists
- Font readability
- Abbreviations and terms
- Grammar and spelling
- Accuracy of alt text



Reach out! We are here to help!



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Phone: 207-621-3195