

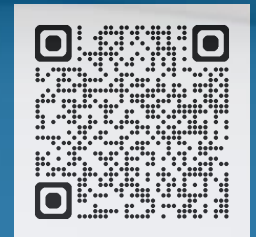
# Maine CITE welcomes you to today's webinar!

## Creating Accessible Digital Content and Presentations

The webinar will begin soon.

Lani Carlson, Maine CITE

March 24, 2026



# Serving all ages and all abilities!

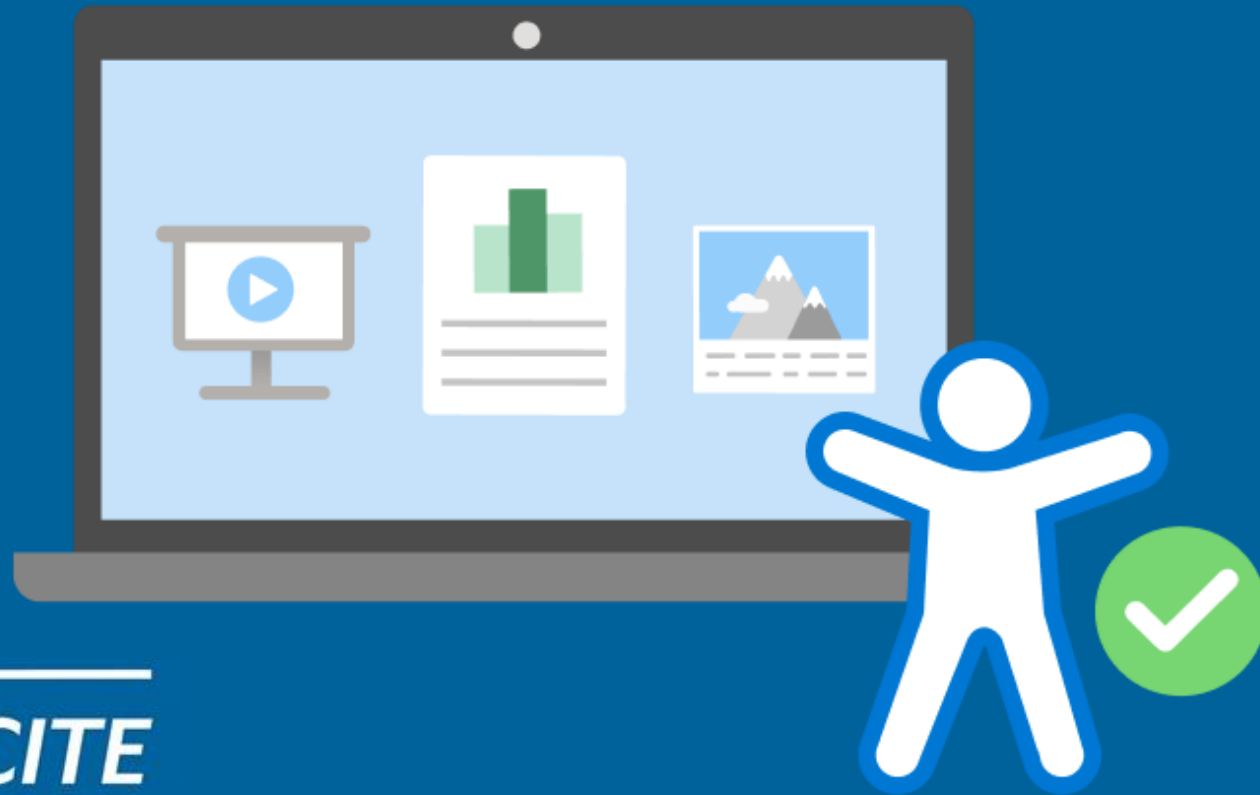
## Maine CITE and partners provide:

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

## Partners include:

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

# Creating Accessible Digital Content and Presentations



# Accessibility



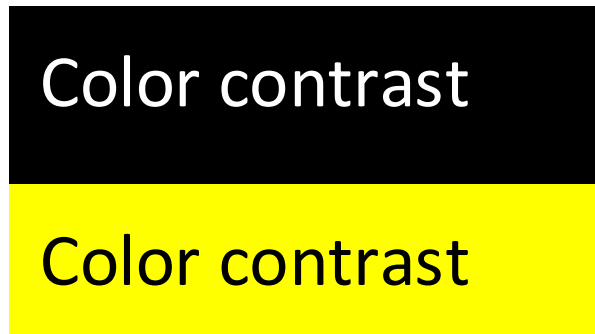
# Information Must Be Understandable

- Know your audience
- Shorter sentences, smaller words

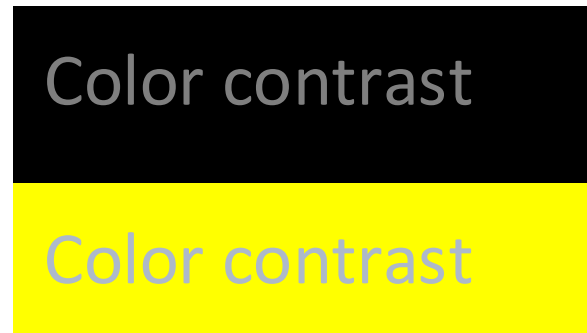


# Color Contrast

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



Color contrast



Color contrast

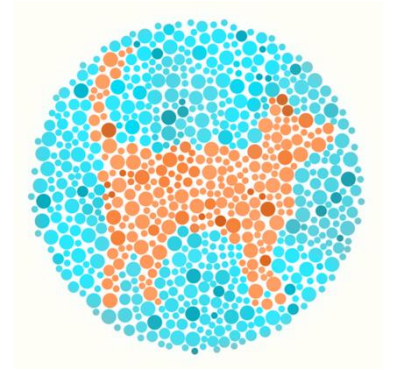


# Color Contrast Checker

Everybody sees color differently.

Website Content Accessibility Guidelines (WCAG)

- Minimum contrast ratios for regular and large font sizes
- [WebAIM.org](http://WebAIM.org)



# TPGi Colour Contrast Analyser

[tpgi.com/color-contrast-checker/](http://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

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 (CCA)

Minimum contrast ratio 4.5 : 1 “regular” sized text

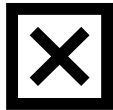
	5.2 : 1 Ratio		21 : 1 Ratio	4.5 : 1 Ratio	
	1.8 : 1 Ratio		<b>19.4 : 1 Ratio</b>	1.4 : 1 Ratio	
	1.4 : 1 Ratio		21 : 1 Ratio		

# 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](https://tinyurl.com/4s2tesmn)



Technology Services

# Reading Order

- Provides navigation
- Elements are 'layers'



Home Insert Draw Design Transitions Animations Slide Show Record **Review** View Acrobat

Paste Slides

Font settings: [ ] [ ] A^ A^ | A

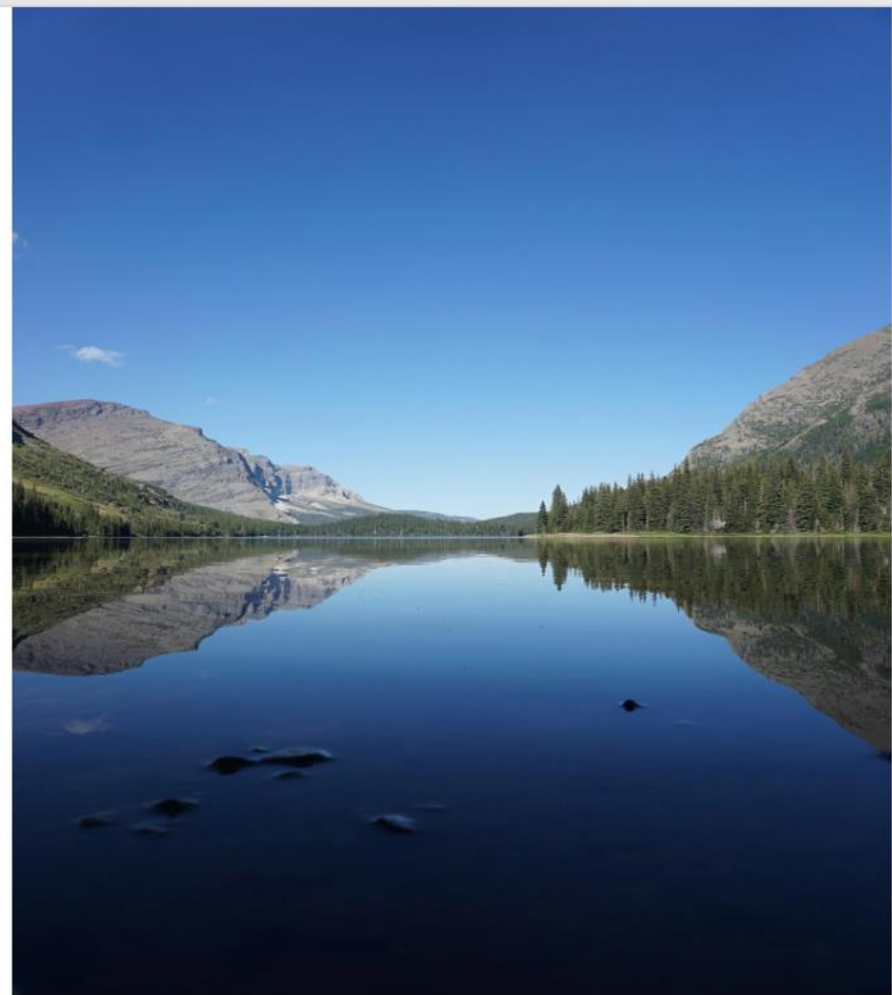
B I U  $x^2$   $x_2$  AV Aa | Paragraph Insert Drawing Sensitivity Add-ins Designer

Create PDF and share link

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

# Reading Order

- Provides navigation
- Elements are 'layers'

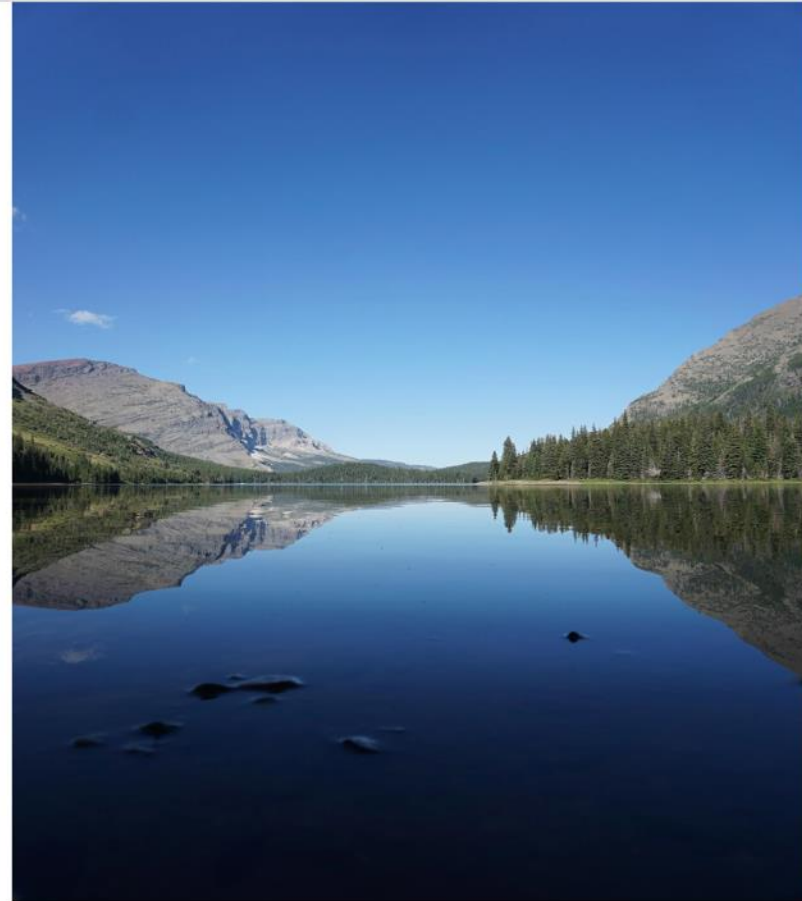


- Check Accessibility
- Alt Text
- Selection Pane...**
- Accessibility Help

5  
6  
7  
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18  
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20  
21  
22  
23  
24

# Reading Order

- Provides navigation
- Elements are 'layers'



- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25

# Reading Order

- Provides navigation
- Elements are 'layers'



**Selection Pane** ✕

Picture	<input checked="" type="checkbox"/>
Text box	<input checked="" type="checkbox"/>
Title	<input checked="" type="checkbox"/>

# Reading Order - Power Point

## Reading Order - Power Point

- Reading order provides navigation.
- Elements are added as 'layers'





# Use Your Tools

- Paragraphs
- Line spacing
- Page breaks
- “Empty elements” in PPT

# Inserting a Table

AutoSave  Home Save Undo Redo Print ...

Creating Accessible Content WORD

Search (Cmd + Ctrl + U)

Comments Editing Share

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

Paste Clipboard

Font: Arial 12 Bold Italic Underline Text Effects

Paragraph: Bullets Numbered List Paragraph Styles

Styles: Normal No Spacing Styles Pane

Voice: Dictate

Sensitivity: Add-ins

Assistance: Editor

Adobe Acrobat: Create PDF and share link Request Signatures


# Table Design

AutoSave ...

Creating Accessible Content WORD

Search (Cmd + Ctrl + U)

Comments Editing Share

Home **Table Design** Table Layout

Header Row  First Column  
 Total Row  Last Column  
 Banded Rows  Banded Columns

Table Style Options

Table Styles

Shading

Border Styles 1/2 pt Pen Color Borders Border Painter

Borders


# Table Layout

AutoSave  Home Save Undo Redo Print ...

Creating Accessible Content WORD

Search (Cmd + Ctrl + U)

Comments Editing Share

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

Select View Gridlines Properties Draw Table Eraser Delete

**Insert Above** **Insert Below** **Insert Left** **Insert Right** Merge Cells Split Cells Split Table AutoFit

Height: 0.13" Width: 1.07"

Distribute Rows Distribute Columns

Text Direction Cell Margins Sort Repeat Header Rows Convert Formula to Text


# Lists

The image shows the Microsoft Word ribbon interface. The **Mailings** tab is selected, and the **Paragraph** group is highlighted with a red rectangular box. The Paragraph group contains icons for bulleted lists, numbered lists, list styles, indent and outdent, decrease and increase list level, paragraph alignment (left, center, right, justified), and paragraph spacing (line and paragraph). Other visible ribbon groups include Font, Styles, Dictate, Sensitivity, Add-ins, Editor, and Adobe Acrobat. The top of the window shows the title bar with the file name "Creating Accessible Content WORD" and a search bar.

# Creating Columns

The image shows the Microsoft Word interface with the 'Layout' ribbon selected. The 'Columns' dropdown menu is open, showing options for 'One', 'Two', 'Three', 'Left', 'Right', and 'More Columns...'. The 'More Columns...' option is highlighted with a red box. The 'Columns' task pane is also open, showing 'Presets' for 'One', 'Two', 'Three', 'Left', and 'Right' columns. The 'Manual' section is expanded, showing 'Number of columns: 1' (highlighted with a blue box), 'Line between' checkbox, and 'Width and Spacing' settings. The 'Width and Spacing' section includes a table for column widths and spacing, and a preview window. The 'Apply to' dropdown is set to 'Selected text'.

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

Search (Cmd + Ctrl + U) Comments Editing Share

Margins Orientation Size Columns Line Numbers

Send Backward Selection Pane Align Group Rotate Arrange

Columns

Presets

One Two Three Left Right

Manual

Number of columns:   Line between

Width and Spacing

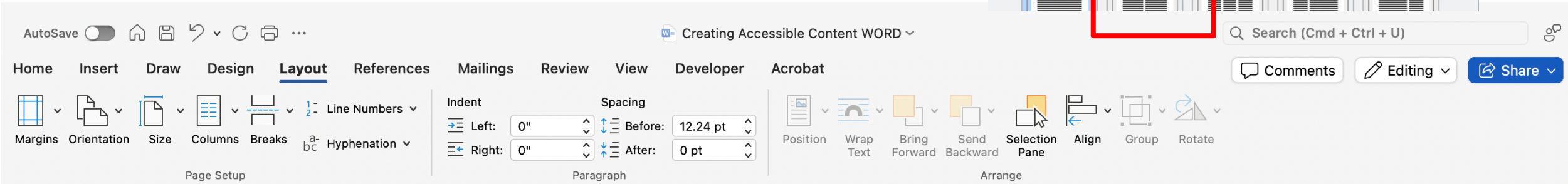
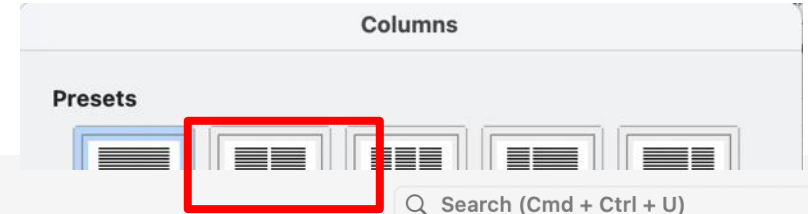
Col #:	Width:	Spacing:
1:	<input type="text" value="7.5"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>

Equal column width

Apply to:   Start new column

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

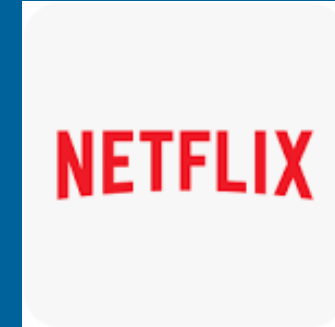
# Alt Text with a Screen Reader

**Screen reader test**  
Images with and without  
alt attribute

# Alt Text

## Other types of images

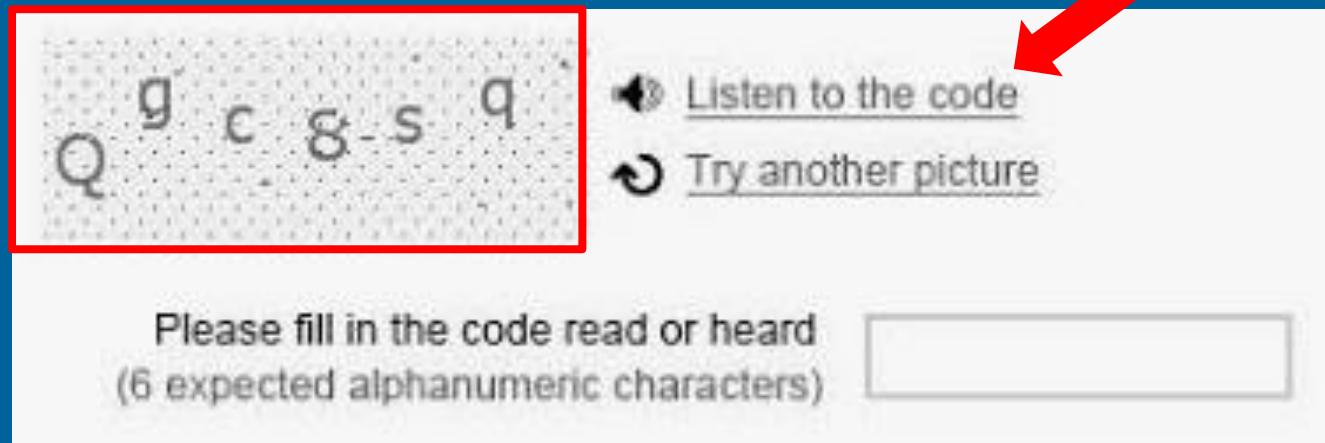
- CAPTCHAs
- Images of text
- Images as hyperlink



Alt text: Netflix icon



Alt text: QR code to [www.maineSITE.org](http://www.maineSITE.org)



Alt text: Captcha image

# 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)*

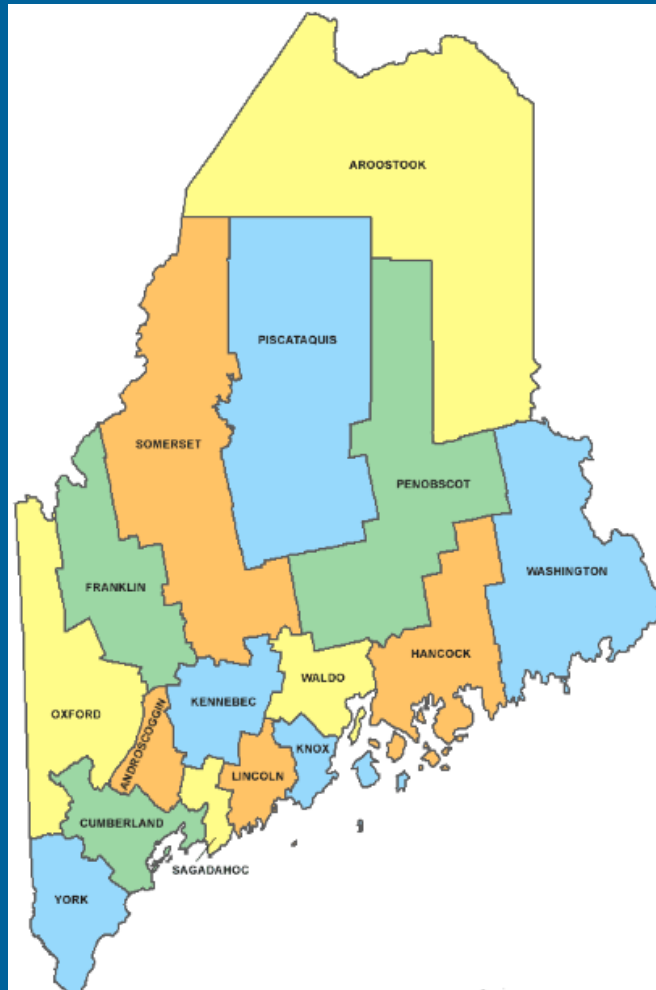
Emojis|

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](http://webaim.org/techniques/captions/media/audiodesc.mp3)



# Audio Description Example



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

# Accessible Presentations

## Content

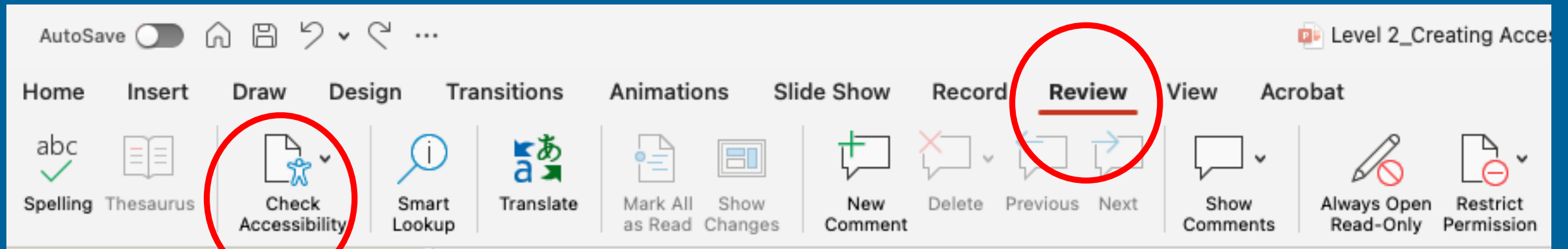
- Color contrast
- Reading order
- Alt Text
- Formatting



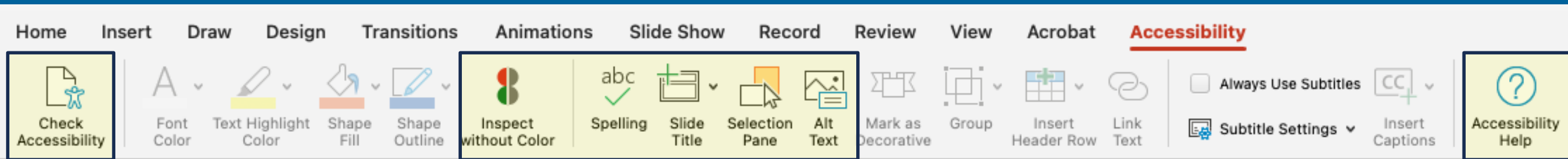
Accessibility Checker in PowerPoint:  
**Review > Check Accessibility**

# Accessibility Checker

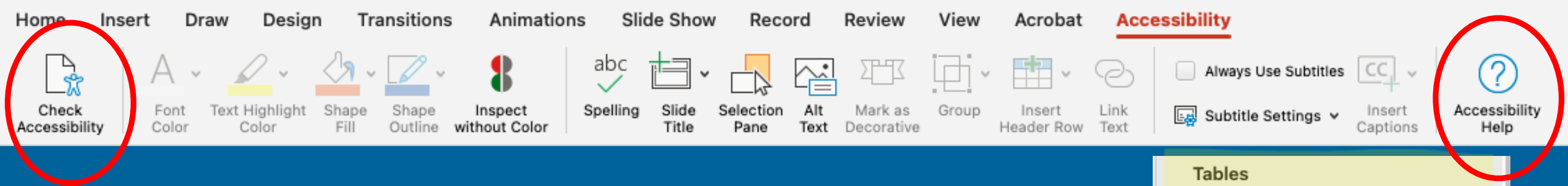
Review > Check Accessibility



# 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** [Close]

**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**

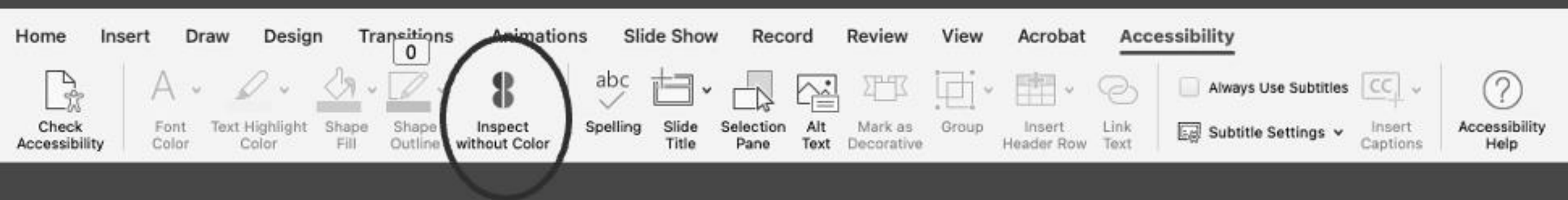
- Missing table header 1 >
- Use of merged or split cells 1 >

**Document Structure**

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

**Document Access**

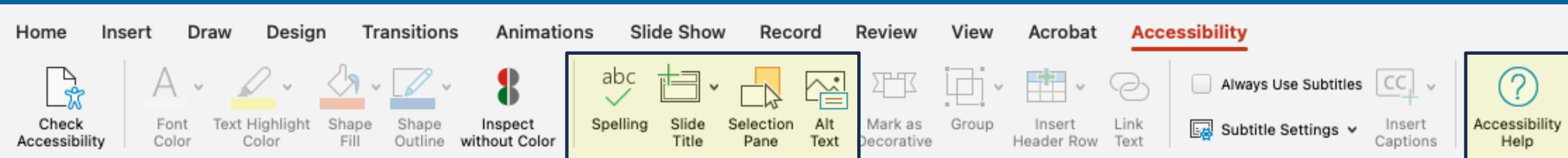
- Restricted access 1 >



## 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!



Web: [www.mainecite.org](http://www.mainecite.org)

Email: [info@mainecite.org](mailto:info@mainecite.org)

Phone: 207-621-3195