

Creating Accessible Information

Making documents and electronic communication information available to everyone



WISCONSIN DEPARTMENT
of HEALTH SERVICES

Overview

- Reasons why documents should be accessible
- Keys to accessible documents and presentations
- Structure and templates
- Accessibility checker
- PDFs
- Social media
- Websites

Always Learning

**WHAT WE DON'T KNOW
WE DON'T KNOW**

**ME DON'T KNOW
WHAT WE DON'T KNOW**

What is Accessibility?

- Design that is easy and intuitive to use
- Implement universal design principles: creating accessible products for everyone, regardless of age, disability, or other factors
- Content that is available to everyone

Where Does This Apply?

- Word documents
- PowerPoint or slideshow presentations
- Social media
- Emails
- Websites
- Live presentation practices

Information Access

How We Get Information:

- Seeing
- Hearing
- Speaking
- Thinking
- Moving

Tools Used:

- Screen readers
- Screen magnification
- Text-to-speech tools
- Speech-to-text tools
- Alternative keyboard and switch access
- Captioning
- Video description
- Comprehension tools

Who Benefits?

- People with disabilities
- People for whom English is a second language
- People using older technologies to access the internet
- People in very loud or very quiet environments where speech is difficult or impossible to understand
- People using mobile devices

Broader Benefits

- Connect with a broader audience
- Build brand appreciation and loyalty
- Rank higher in search engines
- Improve readability and findability

[Accessibility benefits everyone article](#)

Accessibility Laws

- Americans with Disabilities Act (ADA)
- Rehabilitation Act of 1973:
 - Section 504
 - Section 508
- Telecommunications Act of 1996: Section 255

Web Content Accessibility Guidelines (WCAG)

- Internationally recognized guidelines for making web content more accessible, especially for people with disabilities
- Four principles:
 - Perceivable
 - Operable
 - Understandable
 - Robust

It's the Medium Not the Person

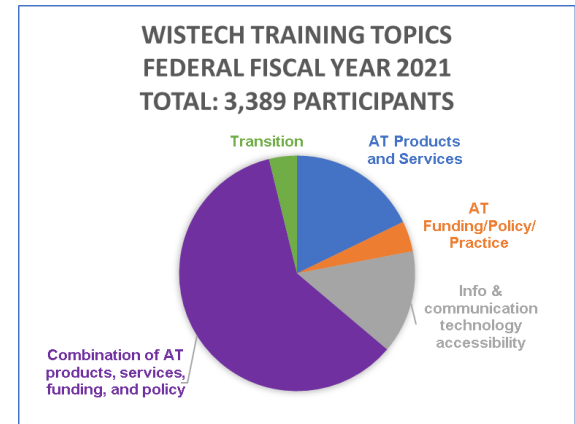
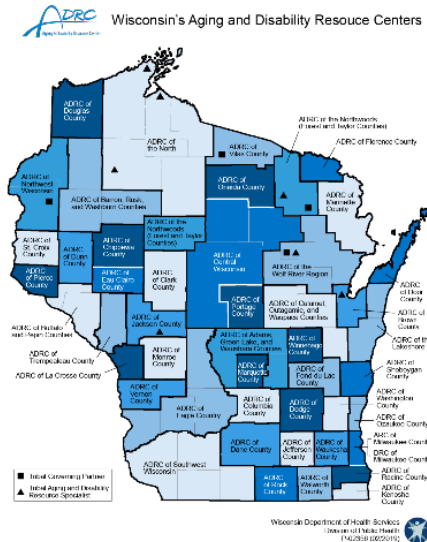


Keys to Accessible Content

- Alternative text and text equivalents
- Multimedia access
- Color use and color contrast
- Plain language
- Appropriate link text
- Document structure and templates
- Reading order and content structure
- Transitions and animations

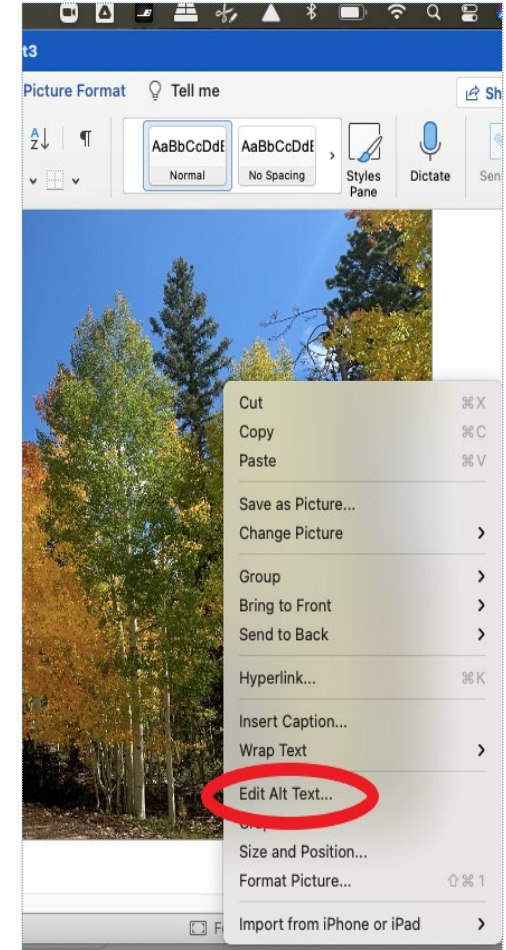
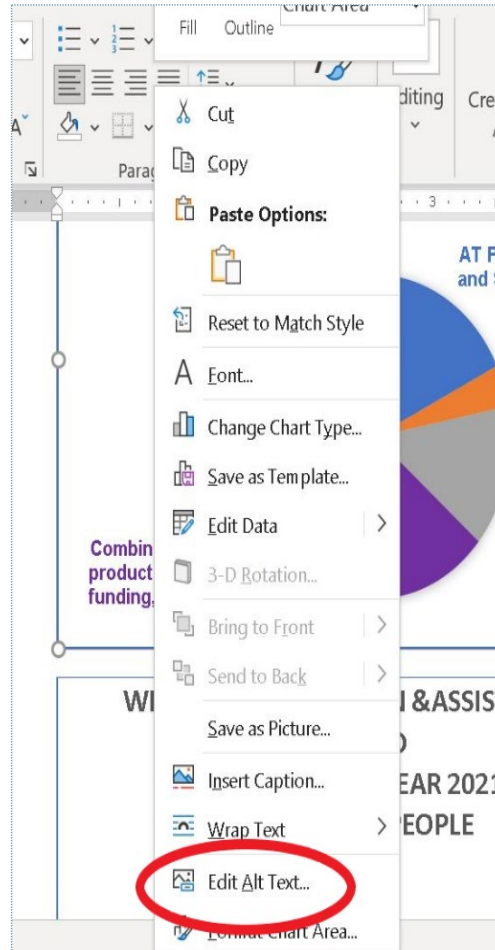
Alternative Text and Text Equivalents

- Often called “alt text”
- Provides non-visual representation of content or function of a visual element



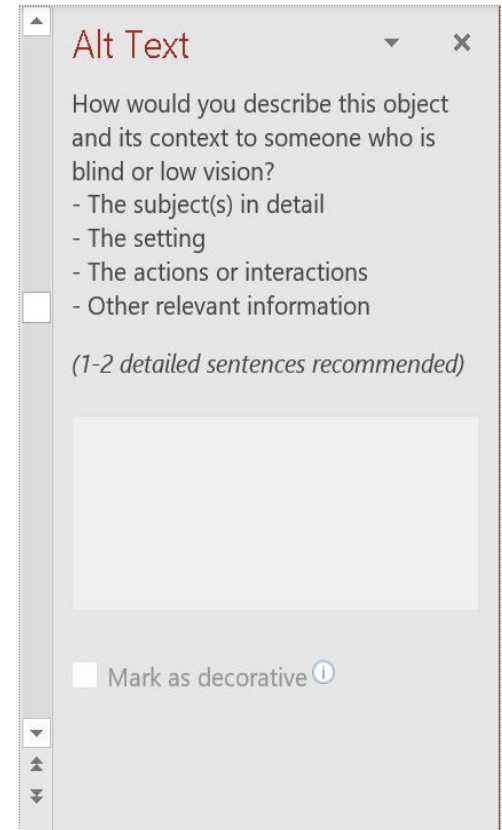
Adding Alt Text

- Right click on the image to select “Edit Alt Text”
- or
- Format picture and then edit alt text



Reminders for Alt Text

- Use the “Description” field.
- Leave the “Title” field blank (not an option in newer versions).
- Use proper grammar.
- Be concise but meaningful.
- Auto-generated alt text is less accurate.
- Mark as decorative if it has no content meaning.



The screenshot shows a dialog box titled "Alt Text" with a close button (X) in the top right corner. The main text asks, "How would you describe this object and its context to someone who is blind or low vision?". Below this are four bullet points: "- The subject(s) in detail", "- The setting", "- The actions or interactions", and "- Other relevant information". A checkbox is present to the left of the text. Below the list is the text "(1-2 detailed sentences recommended)". A large, empty text input area is provided for the user to enter their description. At the bottom, there is a checkbox labeled "Mark as decorative" with a help icon (i) to its right. On the left side of the dialog, there are three small, vertically stacked arrow icons (up, down, and a double arrow pointing down).

Alternative Text Option 2



Visual description: Image of a yellow sunflower surrounded by green and brown foliage.

Multimedia Access

Who Benefits:

- Users with hearing or vision disabilities
- Users with different learning styles
- Users in loud or distracting environments

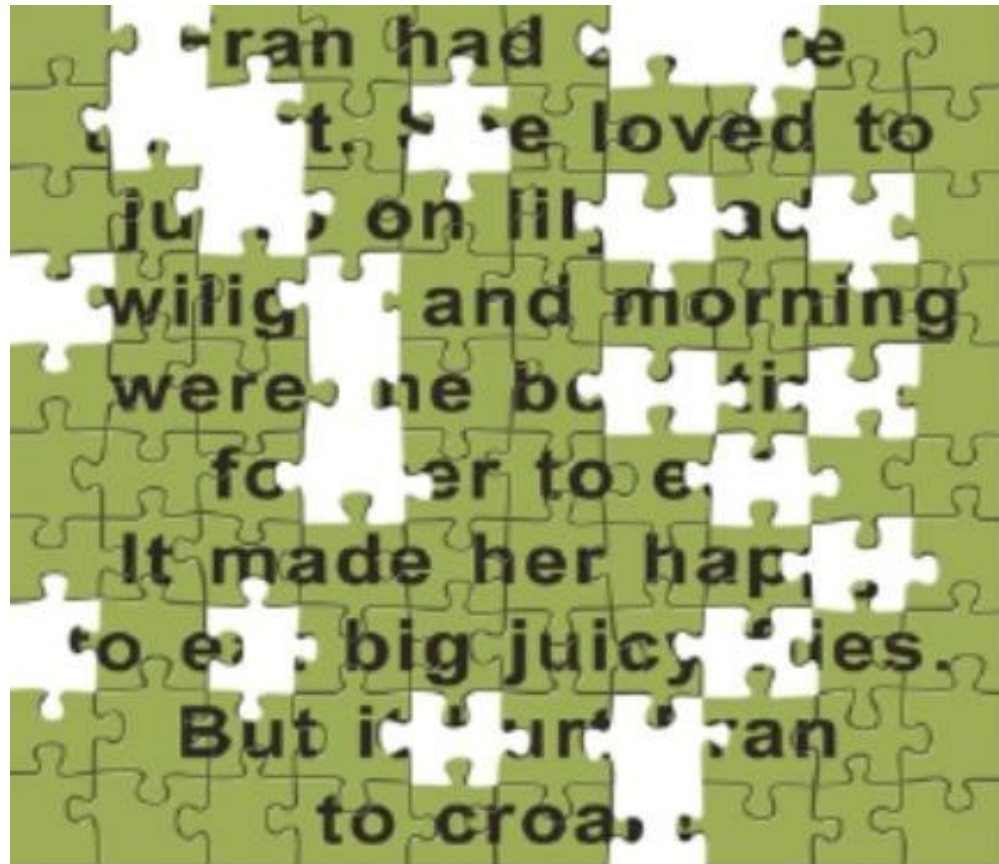
What To Do:

- Captioning; human-powered or automatic
- Alternative languages (including American Sign Language)
- Description of visual content
- Descriptive video

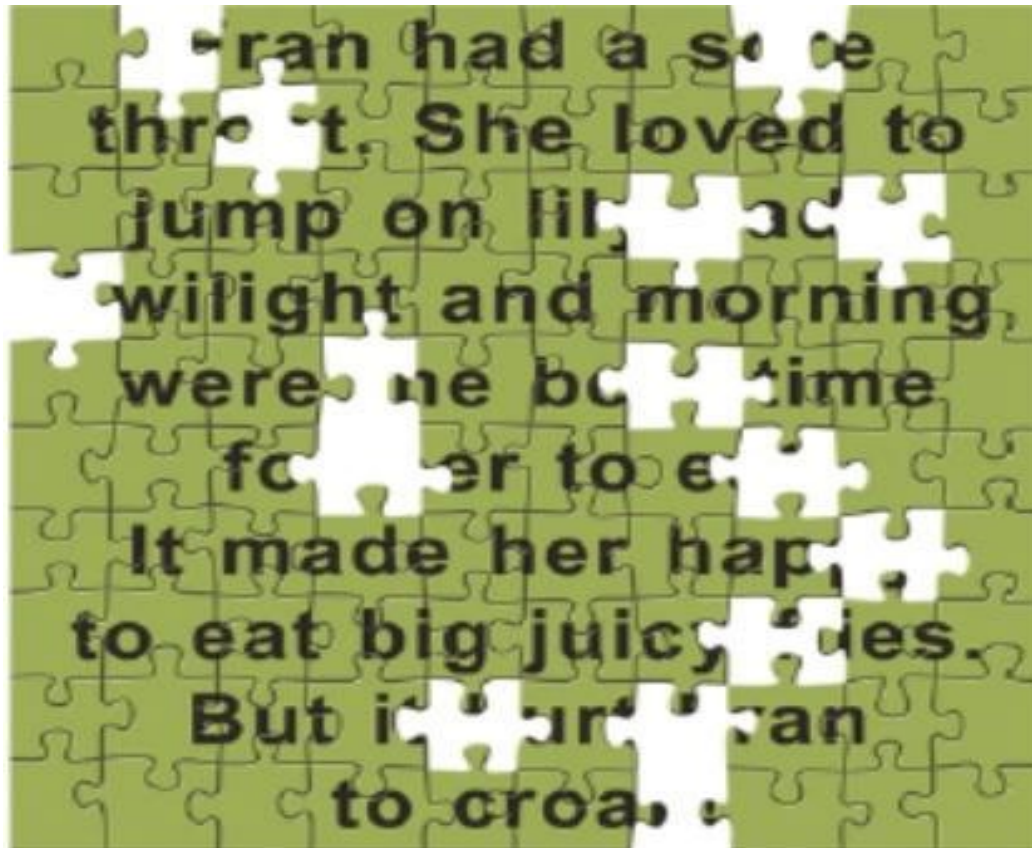
Captioning Accuracy

- Automated captioning is not 100% accurate.
- Automated captioning has grammar and punctuation limits.
- Communication Access Real Time Translation (CART) is human-powered and accurate.
- Any videos should be previewed for captions and accuracy.

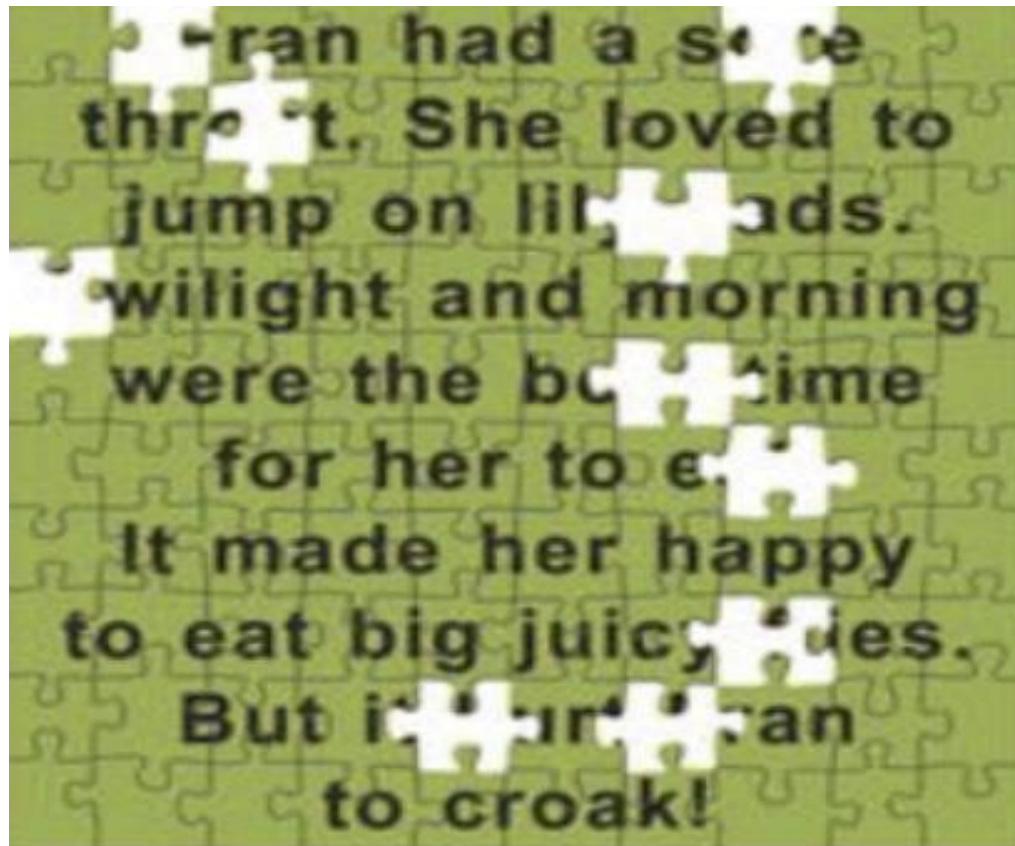
Read My Words 75%



Read My Words 85%



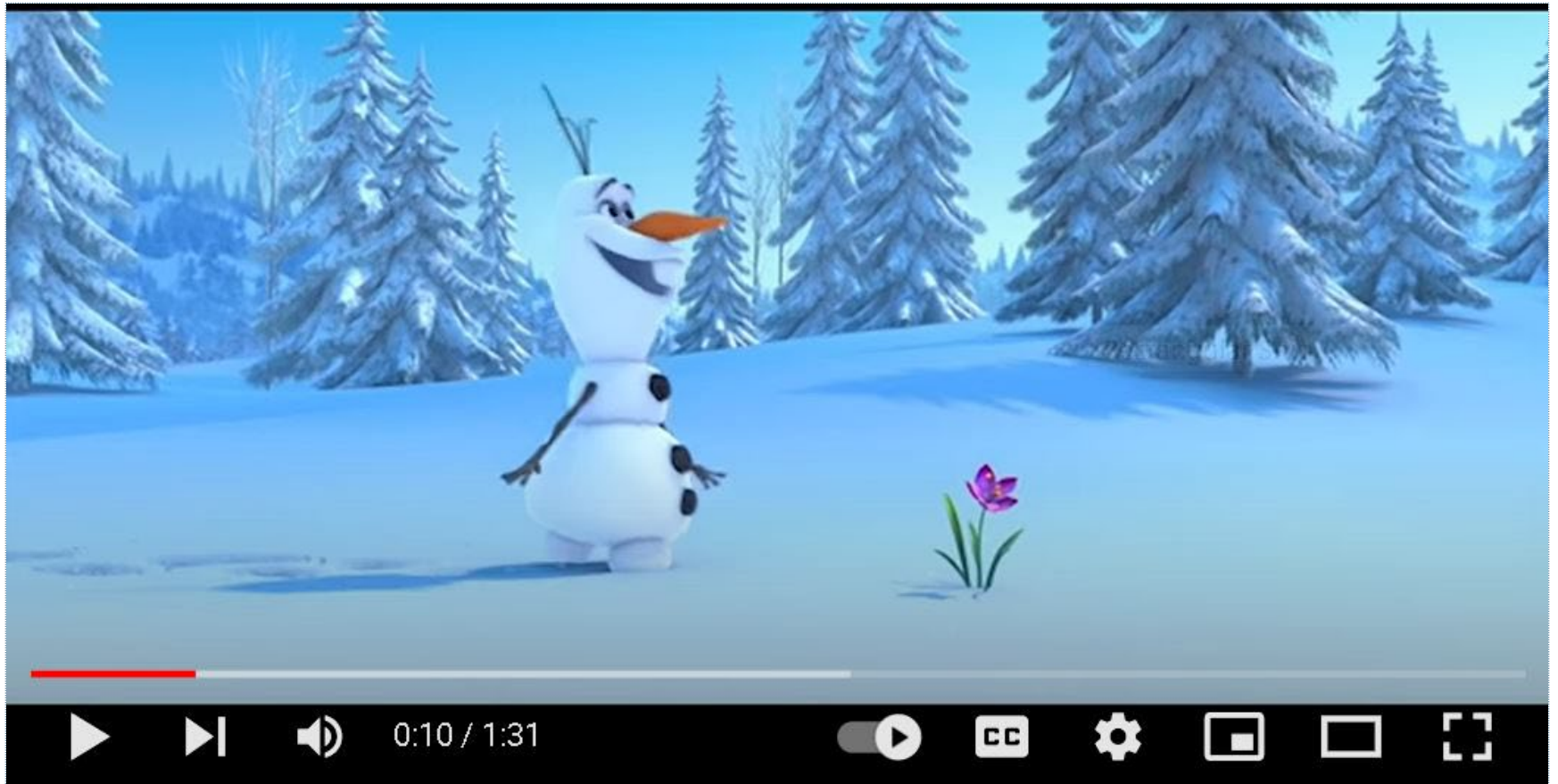
Read My Words 90%



Read My Words 100%

Fran had a sore throat. She loved to jump on lily pads. Twilight and morning were the best time for her to eat. It made her happy to eat big juicy flies. But it hurt Fran to croak!

Video Description Example



Considerations for Color Use

Why Does it Matter?

- Users with color blindness or low vision
- Limited bandwidth
- Older devices

Be Mindful Of:

- Color contrast
- Using color only to convey meaning
- Printing in greyscale
- Background images

Color Contrast

- The difference in perceived brightness between two colors
 - Is expressed as a ratio
 - Applies to visual separation between foreground and background
- Black and white: 21:1
- Minimum WCAG standard: 4.5:1

Color Contrast Examples

21:1

The quick brown fox jumps over the lazy dog

4.5:1

The quick brown fox jumps over the lazy dog

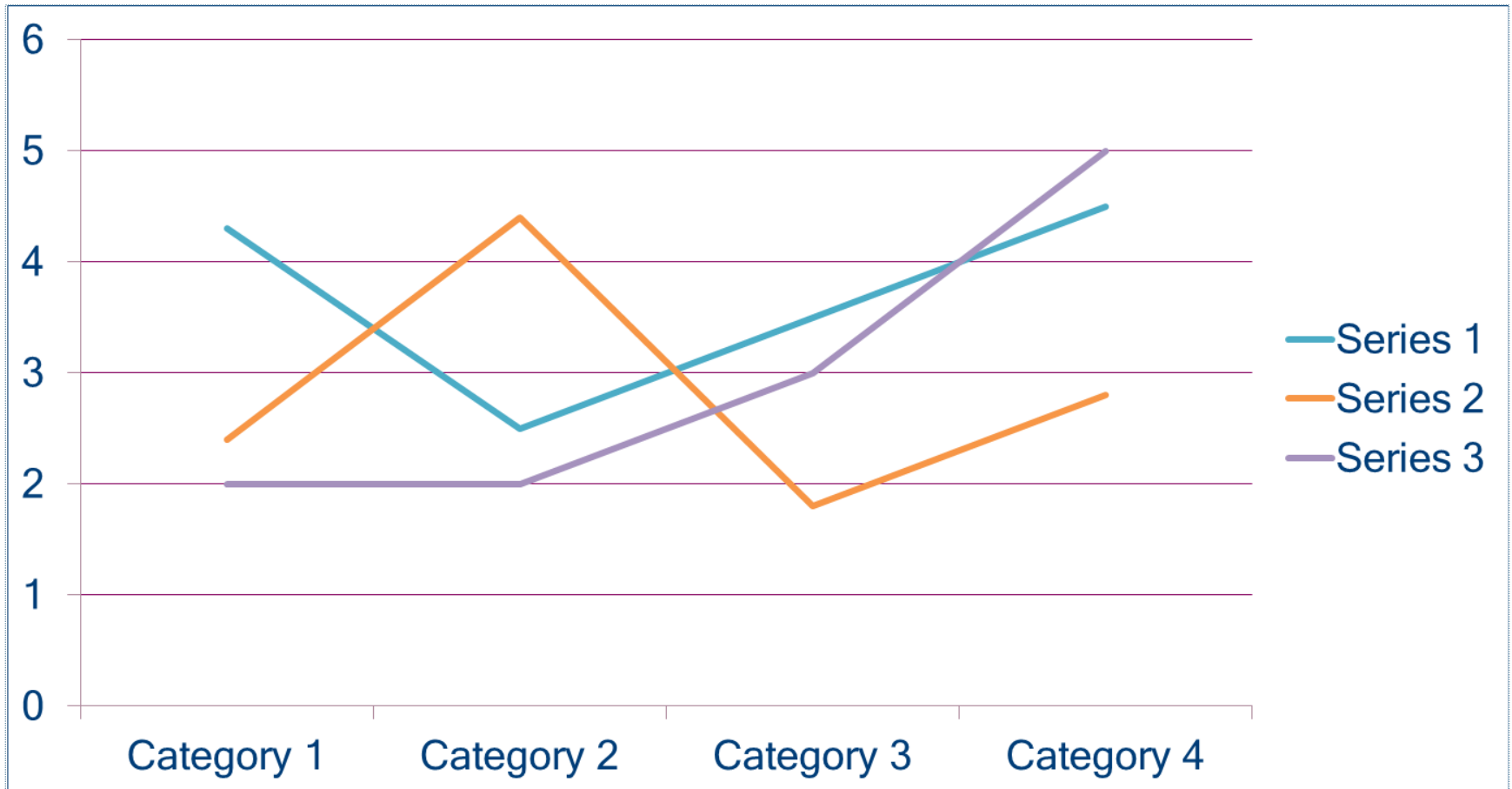
7:1

The quick brown fox jumps over the lazy dog

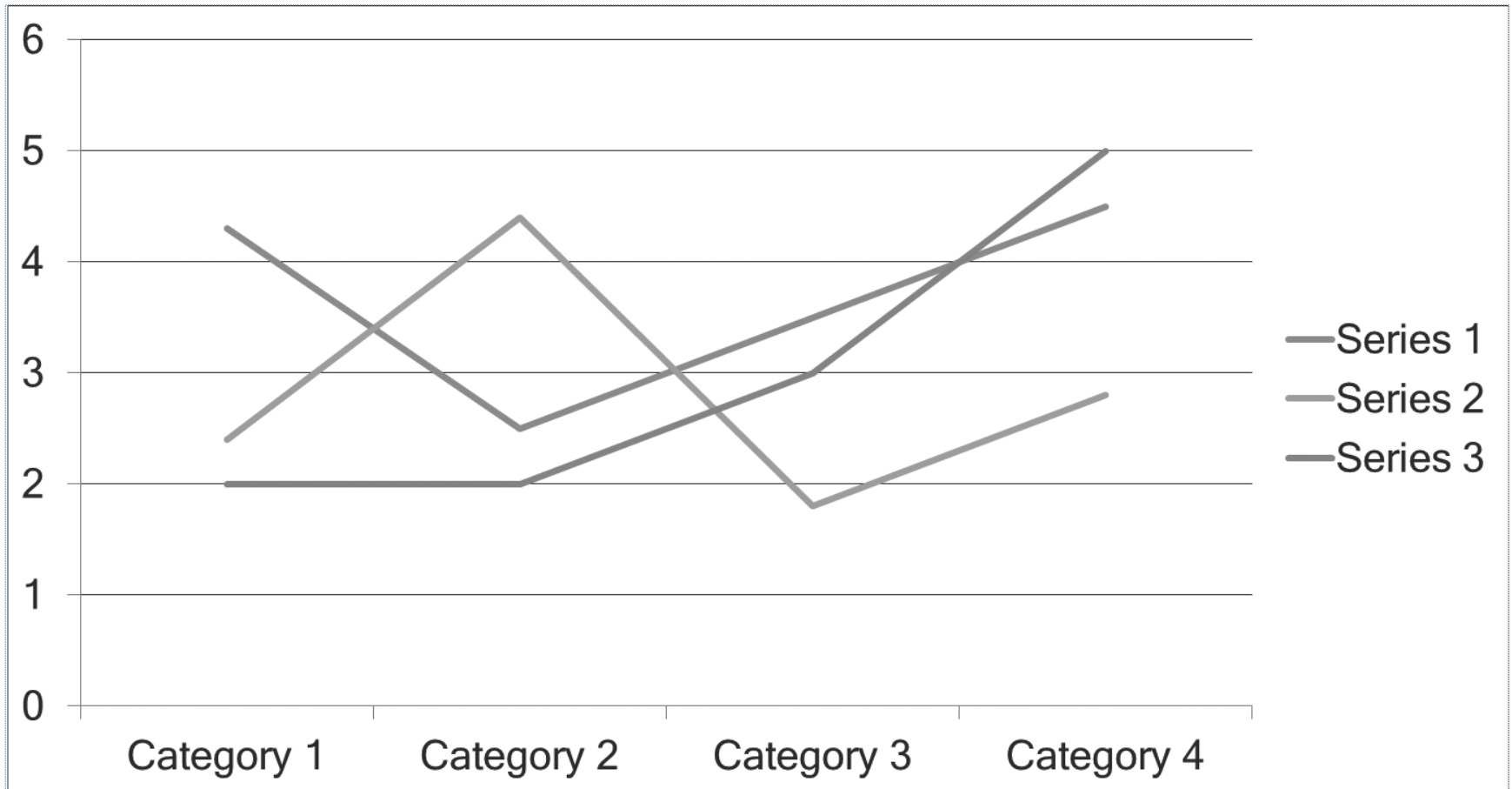
2:1

The quick brown fox jumps over the lazy dog

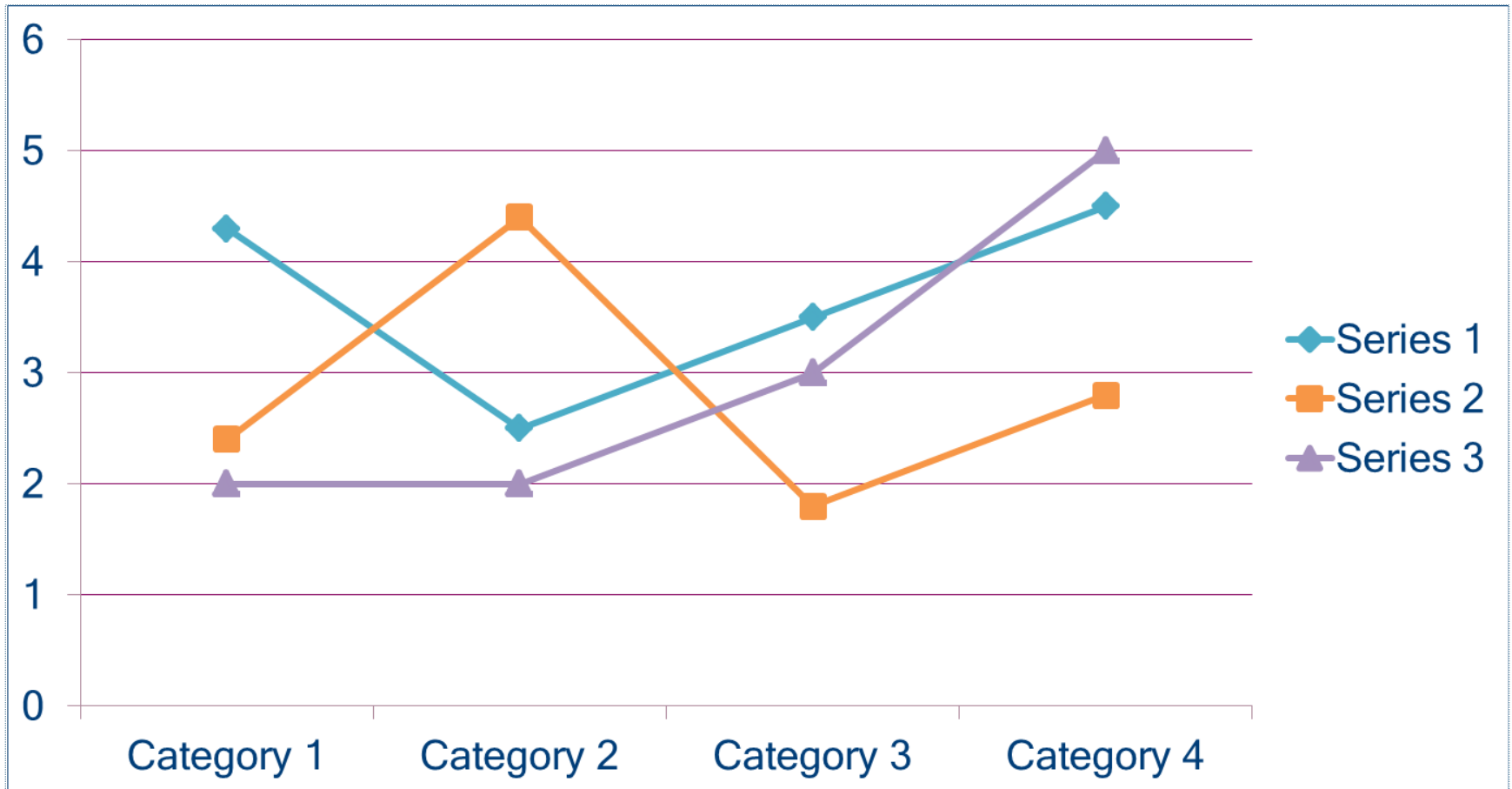
Using Only Color to Convey Meaning



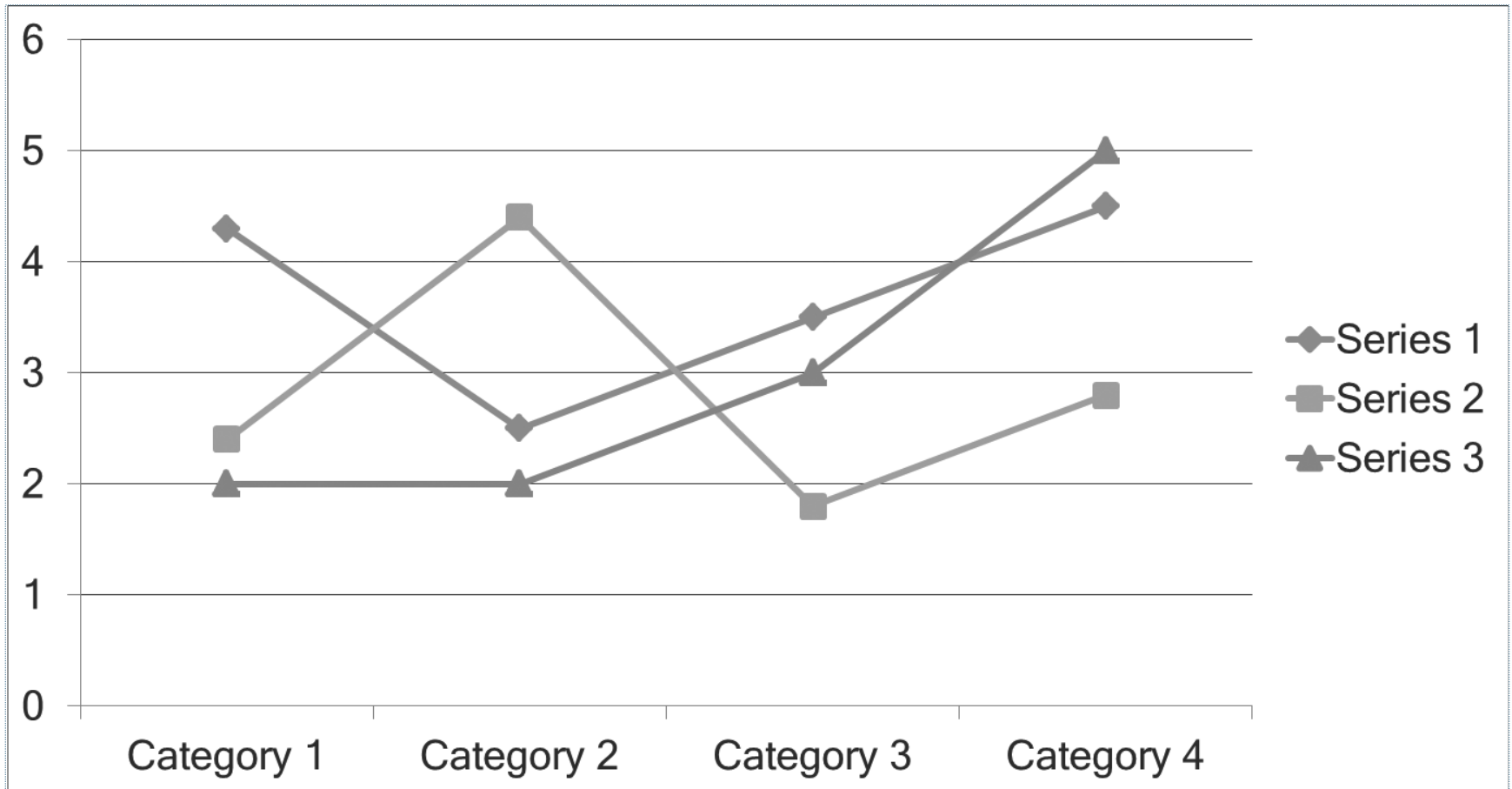
The Problem With Only Using Color



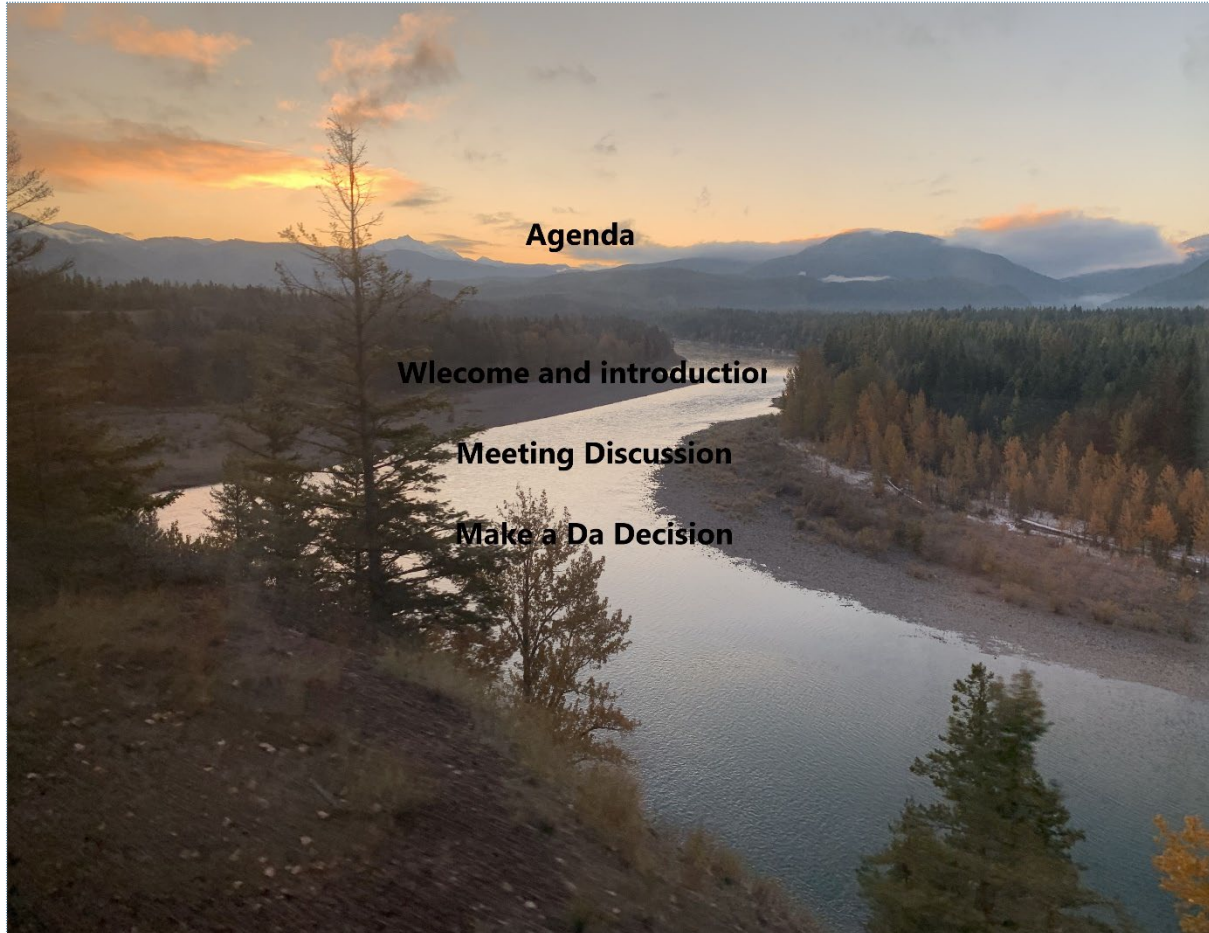
Solving the Problem With Line Markers



Lines Are Still Distinguished



Background Contrast Example

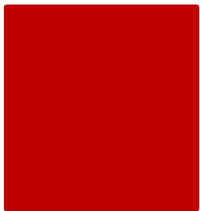


Color to Convey Meaning Example

Congratulations!

You have been selected to attend the Next Big Conference in Madison, Wisconsin in **October**.

Click here and then click on the red box to get a discount code.



Plain Language Example

Not Plain Language

When the process of extricating a vehicle that has been stuck results in ruts or holes, the operator will fill the rut or hole created by such activity before removing the vehicle from the immediate area.

Plain Language

If you make a hole while freeing a stuck vehicle, you must fill the hole before you drive away.

Document Styles and Structure

- Make information easier to navigate.
- Keep text and formatting styles consistent.
- Use tags for headings, lists, and paragraphs.
- Reduce scrolling for users of assistive technology.
- Utilize justified for text alignment instead of centered text.

Heading Structure

- Is categorized as H1–H6
- Is determined by importance
- Makes navigation easier
- Increases reading efficiency
- Is located in the Styles ribbon menu item in Word (Home)
- Is located in text editor tool in publishing platforms
- Can be used to pre-define text color, size, font

Heading Example

The screenshot shows the Microsoft Word interface with the following content:

- Heading 1** — Demonstration of Heading
- Heading 2** — Agenda
 - Welcome and Introductions
- Heading 3** — Meeting Discussion
 - Daily tasks
 - Upcoming events
 - Random thoughts
- Meeting Decisions
- Adjourn

The Styles dropdown menu is open, showing the following options:

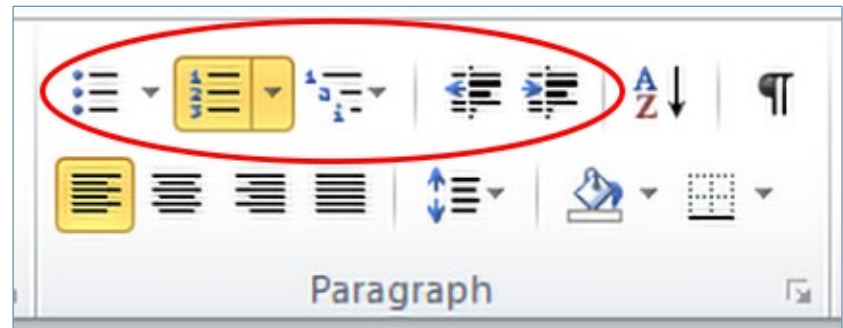
- Normal
- No Spacing
- Heading 1
- Heading 2
- Heading 3
- Heading 4
- Title
- Subtitle
- Subtle Emphasis
- Emphasis
- Intense Emphasis
- Strong
- Quote
- Intense Quote
- Subtle Reference
- Intense Reference
- Book Title
- List Paragraph
- Create a Style
- Clear Formatting
- Apply Styles...

Fonts and Colors

- Some fonts are *easier* to *read* **than** others.
- [How to pick a font from WEBAIM](#)
- [How to Design for Color Blindness](#)
- [Accessibility Basics: Designing for Visual Impairment](#)
- [Best Fonts for Web Accessibility](#)

Lists

- Break up, categorize, and simplify content.
- Use the ribbon functions to ensure accessibility.
- Choose from three options:
 - Ordered (numbered)
 - Unordered (bulleted)
 - Multi-level
(not available in PowerPoint). However, combination lists are an option in PowerPoint.



Complex Data Table

Merged Header Column/Row		Merged Header Column 1					
		HC1	HC2	HC3	HC4	HC5	HC6
MHR1	HR1	D1	D2	D3	D4	D5	D6
	HR2	D7	D8	D9	D10	D11	D12
MHR2	HR3	D13	D14	D15	D16	D17	D18
	HR4	D19	D20	D21	D22	D23	D24

Basic Data Table

Header 1	Header 2	Header 3	Header 4	Header 5	Header 6
D1	D2	D3	D4	D5	D6
D7	D8	D9	D10	D11	D12
D13	D14	D15	D16	D17	D18
D19	D20	D21	D22	D23	D24

Data Tables Demonstration



Demo: Data table

Average daily tea and coffee consumption

Person	Coffee	Tea
Njoki	5 cups	0 cups
Iesha	1 cup	2 cups
Léonie	0 cups	25 cups

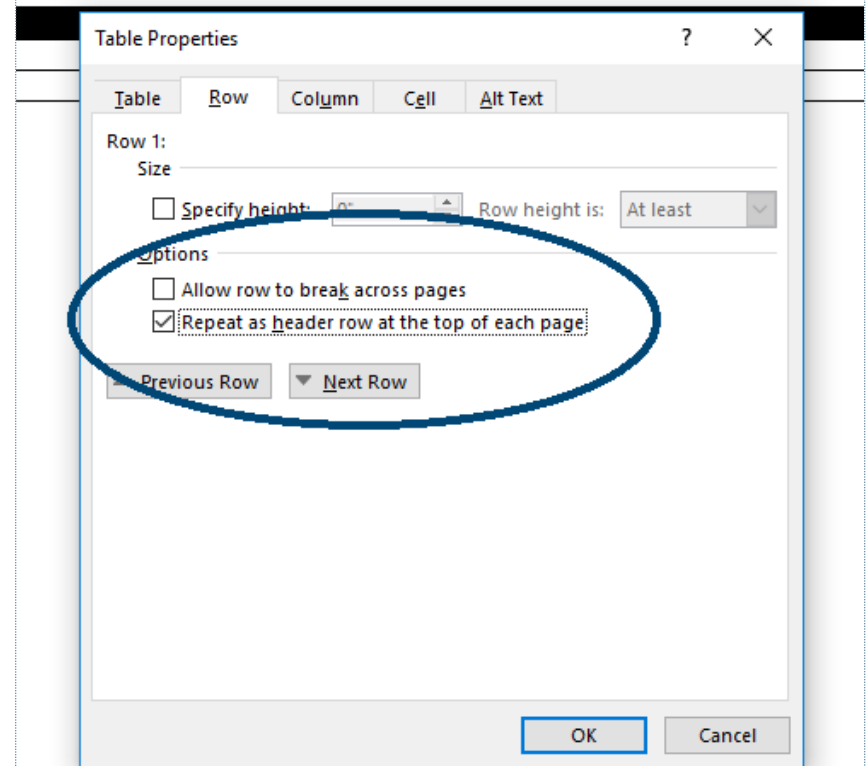
and coffee consumption caption.

© Léonie Watson / Darpe 0:19 / 2:18



Data Tables

- Use for organization and display of content.
- Do not use for design or aesthetic purposes.
- Keep it simple.
- Configure table properties correctly.



Tables Used for Layout

What you see...

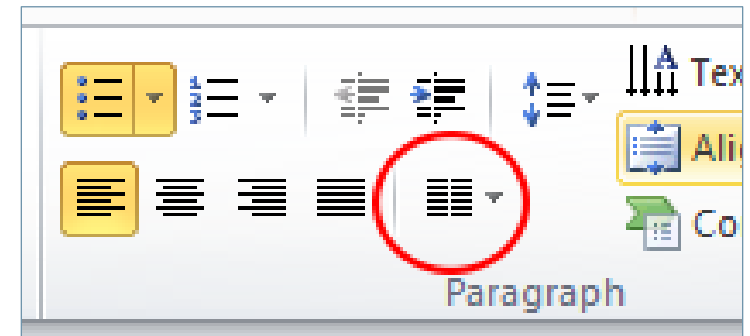
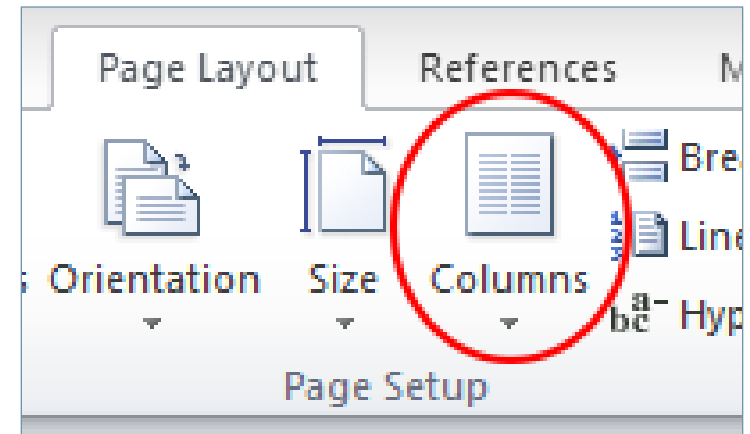
Up
Goes
This

What a screen reader sees...

Blank Cell	Blank Cell	Up
Blank Cell	Goes	Blank Cell
This	Blank Cell	Blank Cell

Columns

- Columns enhance document design and organization.
- The “Columns” button in the ribbon will ensure accessibility.
- Columns that are created correctly will be read from top to bottom, then left to right.



Links

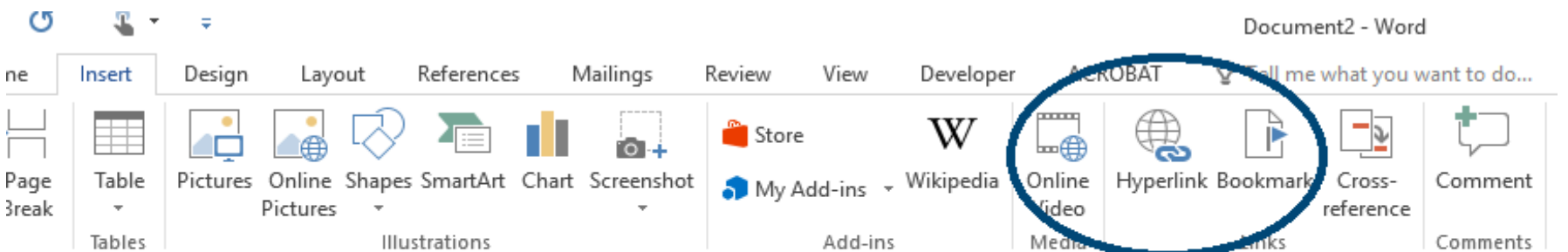
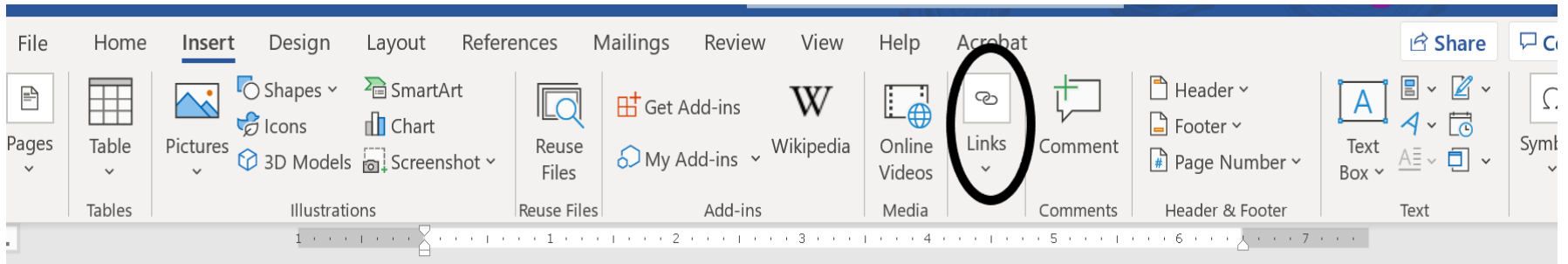
Using or Inserting Links:

- Include text description and the link itself.
- Describe function, destination, or purpose.
- If the link is a form, include the word form in the URL itself
- Consider end source (print or electronic).

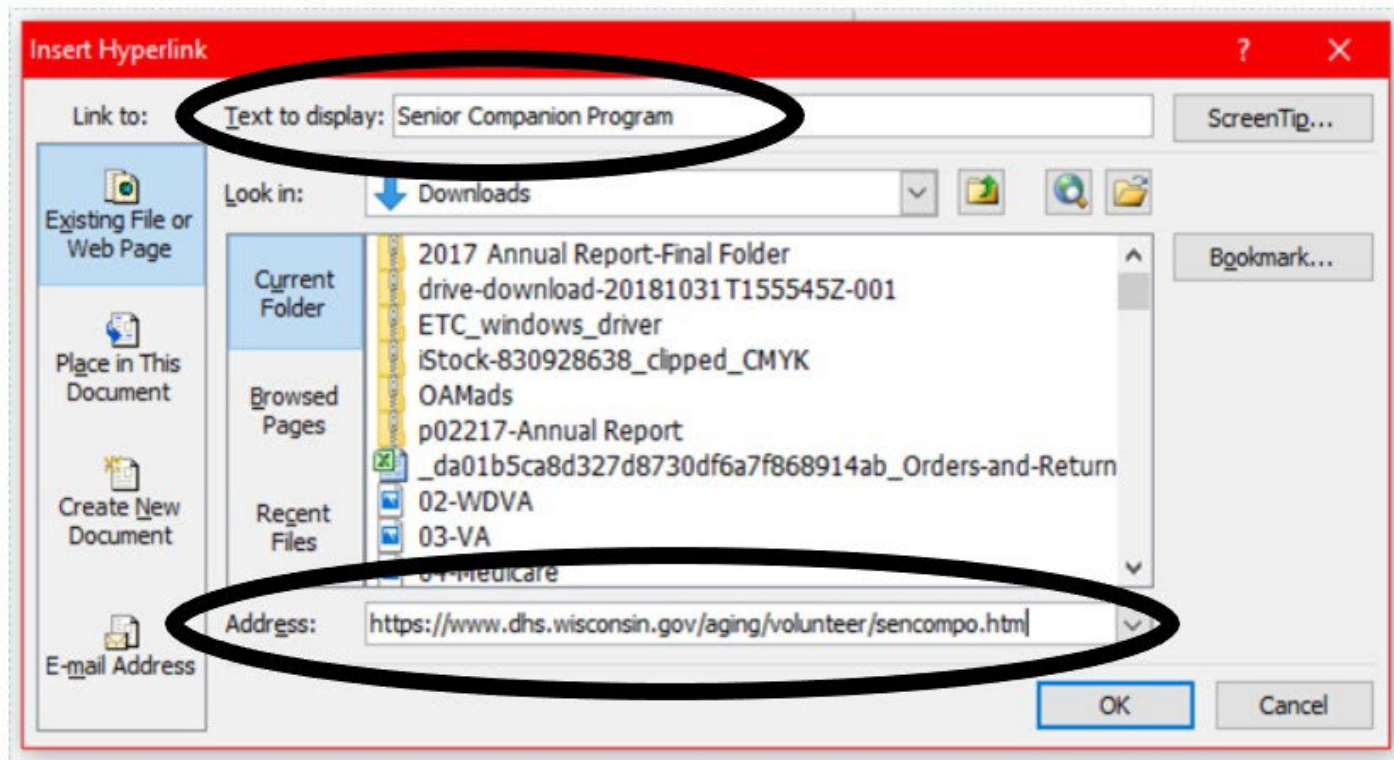
Examples:

- <https://www.dhs.wisconsin.gov/aging/volunteer/encompo.htm>

Inserting a Hyperlink



Additional Insert Link Options





Demo and Practice – Part 1

PowerPoint Key Tips

- Slide Master view
- Reading order
- Unique slide titles
- Hidden slide titles
- Audio and video
- Animation considerations
- Speaker notes
- Accessibility checker

Slide Masters and Templates

- Presentation “base”
- Automatic placement for logos or branding
- Preset fonts, colors, theme, and layouts
- Select layouts you plan to use
- Access through the View tab

- Efficient
- Consistent
- Sets up accessibility in one step
- Hidden gem



Slide Master

- Adjust and create slide layouts.
 - Delete layouts that you know you won't use.
 - Create layouts that aren't available by default.
 - Adjust existing layouts to meet your needs.
- Manage default reading order and content placeholders.
- Make changes on all relevant slides at once.

Slide Master View

Slide Master View interface showing the ribbon and the main slide area. The ribbon includes the following tabs and groups:

- Slide Master**: Edit Master (Insert Layout, Delete, Rename, Preserve), Master Layout (Master Layout, Insert Placeholder), Themes (Themes), Background (Colors, Background Styles, Hide Background Graphics, Effects), Size (Slide Size), Close (Close Master View).
- Home**
- Insert**
- Transitions**
- Animations**: Title, Footers
- Review**
- View**
- Acrobat**
- Tell me what you want to do...**

The main slide area displays a grid of master slides. The top-left master slide is highlighted with a red border and contains the following text:

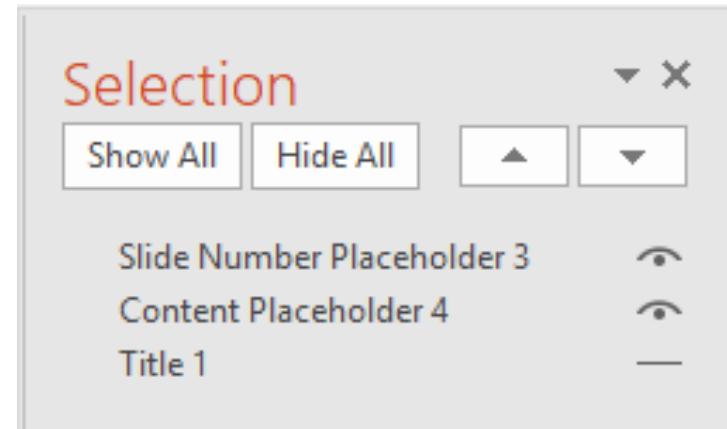
- Master text style
- Second level
- Third level
- Fourth level
- Fifth level

The bottom-right master slide contains a bulleted list:

- Edit Master text styles
 - Second level
 - Third level
 - Fourth level
 - Fifth level

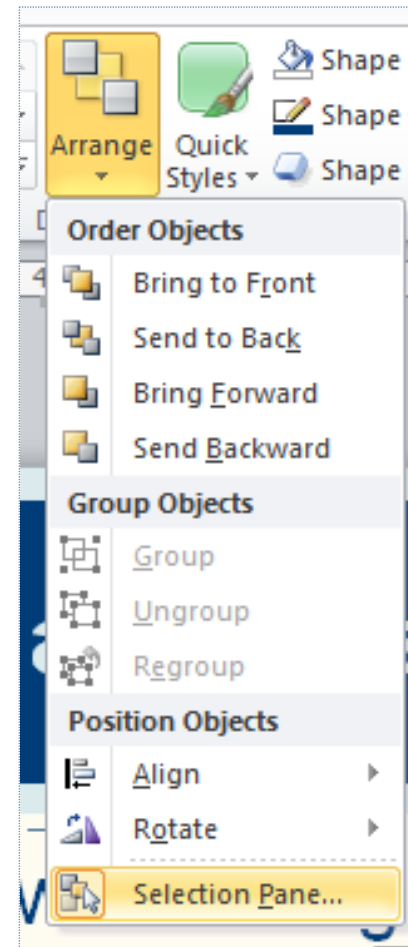
Slide Titles

- Each slide should have a unique title.
- Unique titles allow screen readers to differentiate between slides.
- Screen readers use slide titles for navigation.
- Slide titles can be hidden for aesthetics.

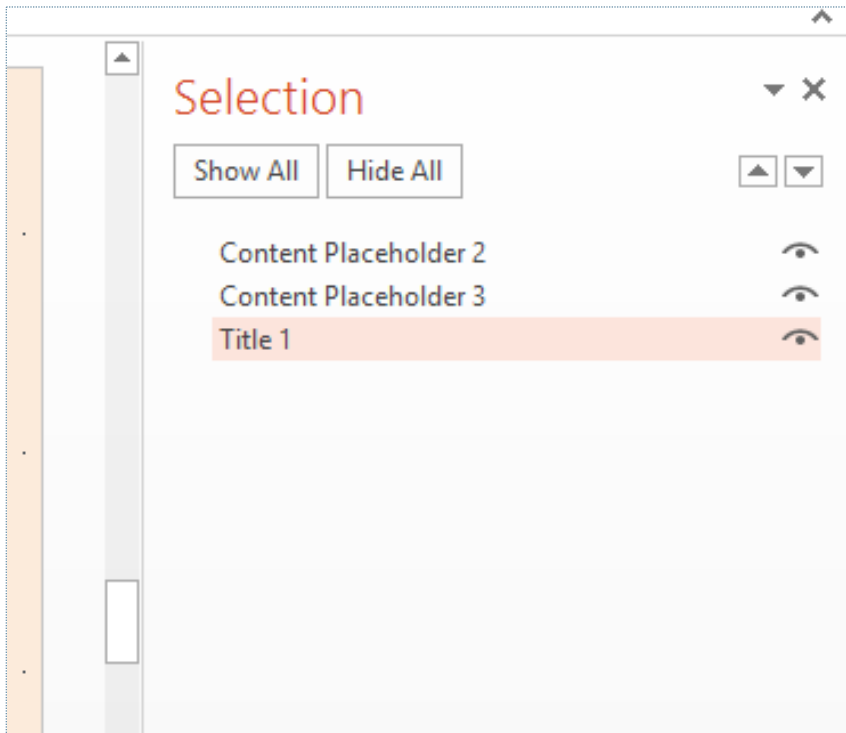


Reading Order

- Screen reading software is not intuitive.
- Factors that affect reading order include:
 - Data tables.
 - Columns.
 - Selection and visibility.
 - Slide master (in PowerPoint).



Selection and Visibility



- Screen readers will determine reading order from bottom to top.
- The eyeball icon toggles content visibility.

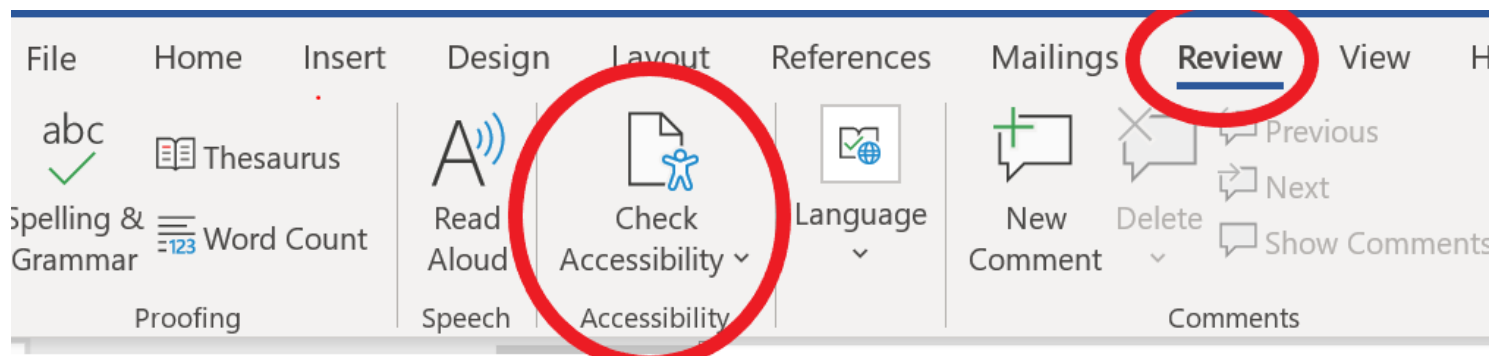
Transitions and Animations

- Adds “flair!” and “pizzaz!”
- Could affect seizure disorders
- Creates added burden for users of assistive technology or individuals with learning or processing disabilities
- Is not compatible with PDF

Demo and Practice – Part 2

Accessibility Checker

- Available in Word and PowerPoint
- It is not perfect
- Shows errors and warnings
- Gives tips and instructions
- Check frequently used templates to ensure accessibility.



Check Compatibility

- Check for compatibility.
- Check compatibility for current and previous versions of Office.

The screenshot shows the 'Info' pane in Microsoft Word. At the top, it says 'Effective Communication' and shows the file path: '\\fiwmad0p0759.dhs.wistate.us » 1wwprofiles\$ » plumle » Desktop'. Below this, there are three main sections:

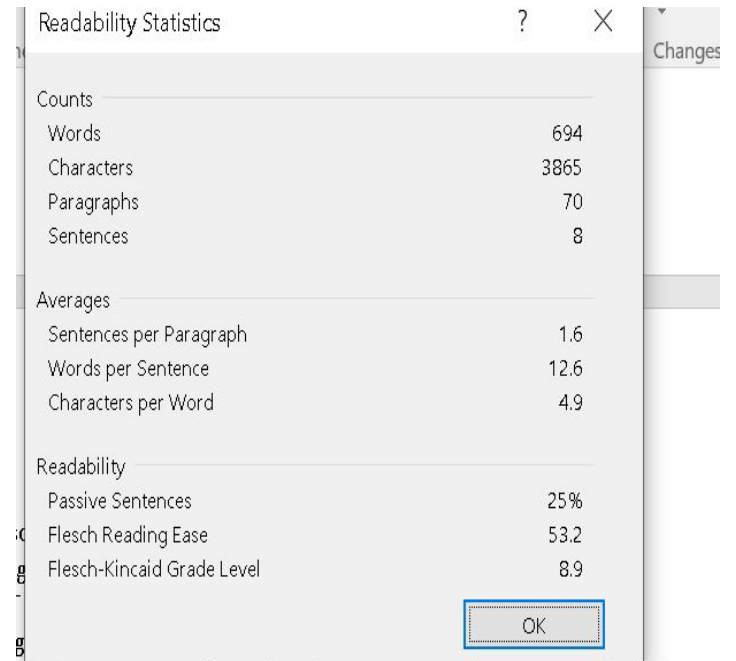
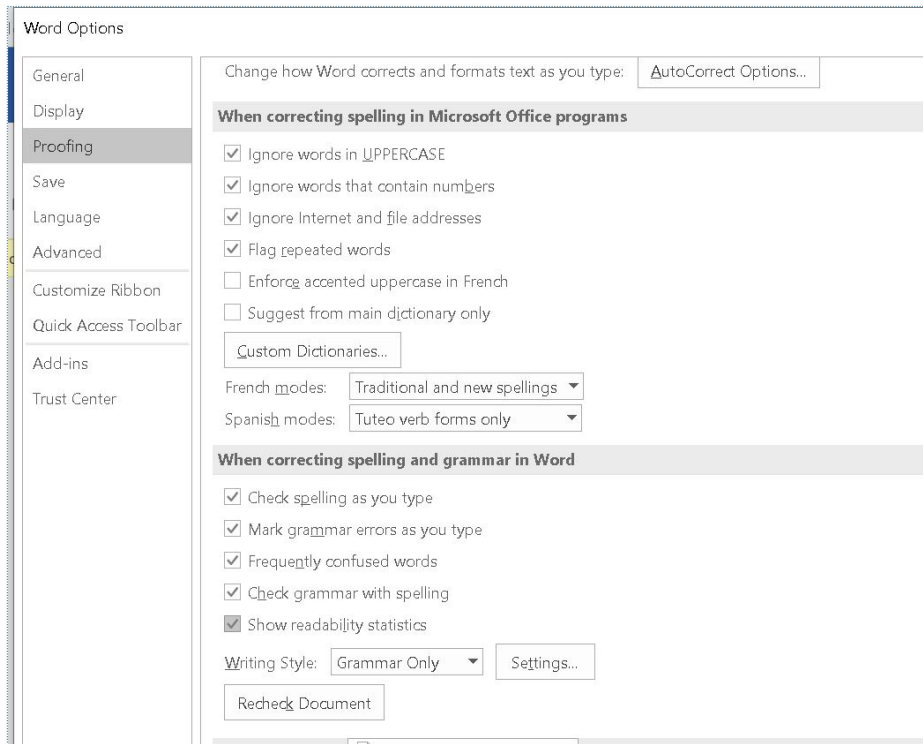
- Compatibility Mode**: A blue box with a document icon and a green arrow. Text: 'Some new features are disabled to prevent problems when working with previous versions of Word.'
- Inspect Document**: A blue box with a magnifying glass icon. Text: 'Check the document for hidden properties or personal information.'
- Check Accessibility**: A blue box with a person icon and a plus sign. Text: 'Check the document for content that people with disabilities might find difficult to read.'
- Check Compatibility**: A blue box with a document icon and a checkmark. Text: 'Check for features not supported by earlier versions of Word.'

Below these is a 'Check for Issues' button with a red checkmark icon. To the right of the 'Inspect Document' section, there is a 'Properties' section with the following details:

Property	Value
Size	17.6KB
Pages	2
Words	682
Total Editing Time	35 Minutes
Title	Add a title
Tags	Add a tag
Comments	Add comments

Below the 'Properties' section are 'Related Dates' (Last Modified, Created, Last Printed) and 'Related People' (Author).

Check Readability



ive for meetings with combined communication (in-person and telephone

Portable Document Format (PDF)

- PDF is best for sharing.
- Accessibility will transfer if done correctly.
 - “Save As” PDF.
 - Do not use “Print to PDF”.



Web Access

- Implement WCAG guidelines.
- Apply same principles used in documents.
- Use [Wave accessibility testing tool](#).

The following apply to the entire page:

Summary

14 Errors	28 Contrast Errors
56 Alerts	24 Features
64	5

Summary Details Reference Structure Contrast

THINGS TO DO STAY EAT & DRINK SHOP EXPLORE PLAN

Code

Social Media Accessibility Resources

- [TikTok accessibility](#)
- [Facebook accessibility](#)
- [Twitter accessibility](#)
- [LinkedIn accessibility](#)
- [YouTube accessibility](#)
- [CamelCase](#)
- [University of Minnesota social media accessibility](#)
- Blogs and newsletters (depends on platform)

Procurement

- Vendors and contractors should adhere to accessibility requirements
- Requests for proposal (RFP)
- Scopes of Work
- Contracts
- [General guidelines](#) (Oklahoma AbleTech)

Pop Quiz #1

WE'RE BACK!

It's been hard the last 18 months. Find renewal and relief in these tough times. Join us IN PERSON for an experience like none other. A leadership program that will *Transform* the way you work and live. Check out our [welcome back video](#). Please share with your peers, co-workers, staff, and colleagues.

This isn't just a training, it's a whole new way to experience the world!

This [3 Day Dynamic Training](#) will leave you more-

- **Confident**...*Find your power and realize your potential*
- **Connected**...TAP INTO A STRONG, SUPPORTIVE NETWORK OF PEERS
- **Clear**...See to the bottom of complex challenges

October 4-8, 2023

[Click the RED box](#)

[Sign UP](#)

Pop Quiz #2

What is the accessible way to make your Word or PowerPoint into a PDF?

- A. Save as PDF
- B. Print to PDF

Pop Quiz #3

What is the best way to add a page to a Word document?

- A. Press the enter or space keys to get to a new page.
- B. Insert page break.

Resources

- [Web Content Accessibility Guidelines \(WCAG\)](#)
- [WCAG color contrast checker](#)
- [National Assistive Technology Act Technical Assistance and Training \(AT3\) Center](#)
- [Department of Health Services, Bureau of Aging and Disability Resources](#)
- [MN Accessibility Quick Cards](#)
- [U.S. Access Board ICT Testing Toolkit](#)
- [How to Design for Color Blindness](#)

Additional Training

- If you are looking for resources for outside entities I would direct people to the series of archived trainings from the AT3 Center:
 - <https://www.youtube.com/playlist?list=PLjDjG3djdubm6d0aJEacxj28dDnqgw1cX>
 -
- WisTech also has done a few, including the session last fall on developing content for people with learning and cognition differences:
 - https://www.youtube.com/watch?v=G_eIDgfHr9s
 -
- Lastly, the Office of Accessibility from MN has a fantastic website and a Word training:
 - <https://mn.gov/mnit/about-mnit/accessibility/training/>

Thank You!



Questions

Feedback

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