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# Accessible Documents: Word to PDF



**HTCTU**

High Tech Center Training Unit

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**[www.htctu.net](http://www.htctu.net) • [www.toolsthatinspire.com](http://www.toolsthatinspire.com)**



# Accessible Instructional Materials

- Build in accessibility before putting the material online!
- All online instructional materials need to be accessible
  - PDFs
  - PowerPoint presentations
  - Podcasts
  - Videos
  - Software



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# Creating Materials

- Online documents
  - Must be text (not scans) and have structure (headings, etc.)
- Graphics
  - Add “alt text”—**brief** description
- Videos and multimedia
  - Captioned
  - Back-up plan for audio description



# GOOD ALT TEXT



# Describing Graphics

- First figure out the purpose (intent) of the graphic.
- Does the student need to do something with the graphic (part of an exercise)?
- What does the graphic convey?
  - What specific information does the graphic communicate?
- Who is the intended audience?



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# Context Is Everything

- Context can change the description!
- The same graphic may have a different purpose in a different context.
  - Sometimes decoration
  - Sometimes informational
  - Sometimes an illustrative point



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# First Question to Ask

- Information or Decoration?
- How much is the purpose of the graphic informational?
- How much decoration?



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# NCAM on STEM

- ❑ Summarize briefly and then provide details
- ❑ If color conveys information, include; otherwise, no
- ❑ If appropriate include info on shape/size
- ❑ Consider the intent of the image, as well as intended audience





# No One Right Way

- There is no single best way to describe graphics.
- Just remember...
  - Keep context in mind
  - Ask yourself: Is this something the person really needs to hear?

# Exercise 1

- In a book about health, this full-page photo appears at the beginning of a chapter on nutrition:





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# Possible Alt Text

- The photo is decorative.
  - It is simply illustrating the theme of the book.
  
- Keep the description simple:
  - People biking

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## Exercise Photo 2

- In the same textbook, the graphic below is included next to boxed text about the benefits of strength training.



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# Possible Alt Text

- This graphic is purely decorative.
  - Since this graphic is essentially “eye candy,” it is a good example of when a null tag (HTML) or decorative text (PDF) might be useful.
  - If you do want to describe, keep it very short: “Smiley face lifting weights.”
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# Logo Example 1



Kansas City Kansas Community College

Presents an Evening of Jazz

Come join us for two hours of wonderful jazz by  
the lake. ...

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# Possible Alt Text

- The logo is decorative.
  - Logo is branding for school, but in this context is essentially decorative from the end-user's viewpoint.
  - Since the graphic is decorative, keep it simple.
    - College logo
    - KCKCC logo
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## Logo Example 2

- In marketing your business, the design of a logo can make a big impression or can be a waste of money. The logo needs to be attractive but not dominate other information presented along with the logo. In the example below, what catches your attention?







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# Possible Alt Text

- The logo is informational.
  
  - In this case, the same logo is a specific example and requires a more lengthy description.
  
  - Focus on what the student needs to know:
    - Interlocking blue K and red C on left with the words “Making Life Better” in red above the college name in black blocked and underlined with a blue line.
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WAI and WebAIM

# ACCESSIBLE DOCUMENTS



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# The Life and Times of PDFs

□ PDFs happen two ways

1. Documents are scanned
2. Documents are authored in Word or other program and turned into PDF



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# Graphical vs. Text-based PDF

- Scanned PDFs are pictures of text
- Computers cannot read a picture
- Documents are not e-text unless the computer can see the letters as text
  - Text can be highlighted with the mouse
  - Text can be selected a letter / word at a time
  - Text can be searched



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# PDFs Need to be Text-based

- Searchable PDFs are text-based
  - Not scans or “pictures” of text
- If you scan, you need to run Optical Character Recognition (OCR) to obtain text
- If you start from a Word document, you will have text
  - Now you just need to ensure the PDF will be accessible



# Resources for Faculty

- If faculty are scanning documents, recommend a campus copy of ABBYY FineReader
  - Easy to use optical character recognition (OCR) program
  - Perhaps have copy in teaching & learning center or faculty support center



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# Create Accessible

- To create an accessible PDF, start with a well-structured Word document
  - Open Office works equally as well
  - InDesign requires some additional steps



# HANDS-ON WITH MS WORD





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# Access in Word

- Documents
  - Logical structure
  - Clear components
  - Good color contrast
- Graphics
  - Briefly described

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# Four Simple Steps in Word

- Links: Name links logically
  - Images: Add alt text
    - Picture descriptions
  - Styles: Use templates and styles
  - Tables: Mark the header row in tables
  
  - THEN make it into a PDF
-



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# Helpful Acronym

- Use this “colored” **LIST** for access!
- **L**inks
- **I**images
- **S**tructure
- **T**able
  
- And watch your **color contrast!**



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# L is for Links

- Instead of ...
  - Click here for document X
- Use the name or description as the hyperlink
  - Document X has the information you need



# Benefits

## □ Benefit for you

- You don't lose connection with your materials when you make edits
- Linking to documents and learning objects by their names allows you to keep track of them easily!

## □ Benefit for others

- What you get when you click is clear
- Screen reader users can use a "links list"



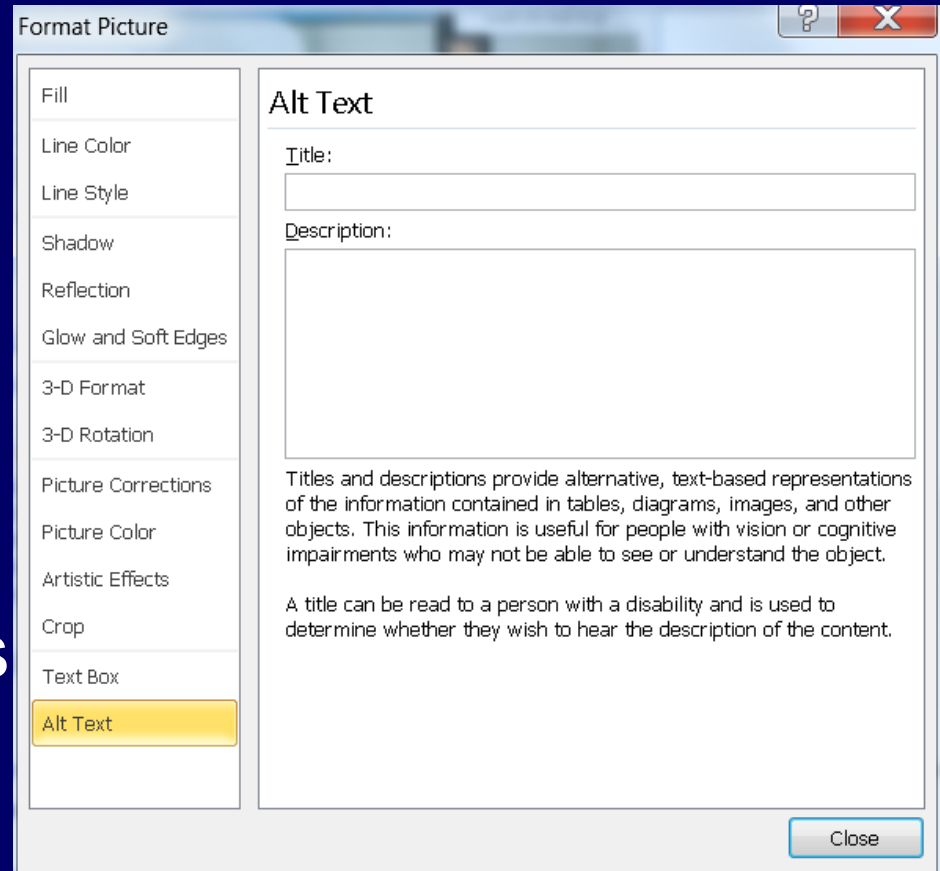
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# How to Create a Link

- ❑ Select the text for the hyperlink's name
- ❑ Right-click
- ❑ Choose "Hyperlink..."
- ❑ Browse to the object you want to link

# Alt Text

- ❑ Right click on picture
- ❑ At bottom of window, choose Alt Text
- ❑ Note: Put the alt text where it says “Description”





# Checklist

√ Links





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# I is for Images

- Add very brief text description
- If graphic is simply decoration, wait and mark it as “decorative” in Adobe Acrobat Pro
- If graphic is informative, describe as succinctly as possible



# Benefits

## □ Benefits for you

- Requires “out of the box” thinking
- Text becomes searchable online

## □ Benefits for others

- Text appears on mouse-over, clarifying purpose of graphic
- Provides access for nonvisual users
- Higher “hit” on Google



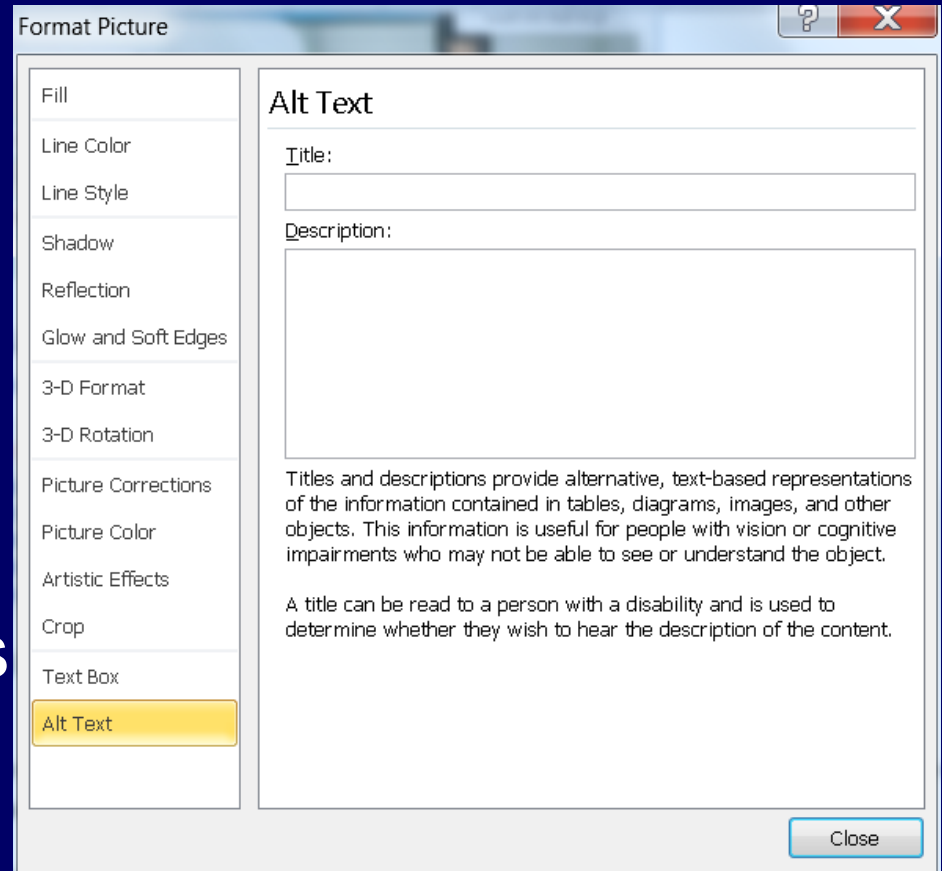
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# How to Create Alt Text

- Right click on graphic
- “Format Picture”
- “Alt Text”
- Enter text in “description”

# Alt Text

- Right click on picture
- At bottom of window, choose Alt Text
- Note: Put the alt text where it says “Description”



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# Checklist

√ Links

√ Images



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# S is for Styles

- Use styles
  - Headings
  - Lists / bulleted lists / numbered lists
- Use columns if needed
- DO NOT use text boxes



# Benefits

## □ Benefits for you

- Allows easy changing and editing
- Improves document navigation
- Can use “outline” view to rearrange sections
- Automatic table of contents

## □ Benefits for others

- Improves document navigation for all—headings useable with screen readers



# In General

- Font size and readability
  - 12 point is good
  - Avoid fonts that will be difficult to read online
- Color contrast
  - Be aware of color!
  - Avoid white text on light background; avoid black text on dark background
- Avoid using enter key for spacing





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# Styles Are So COOL!!

- Quick and easy formatting
- Very simple to change
- Using “Outline” feature allows for rapid editing and rewriting
- Automated table of contents
  
- Oh...and BTW, it's now accessible!



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# What's a Style?

## □ Paragraph styles

- Paragraph attributes
- Font type & size, line spacing, indent
- Affects entire paragraph

## □ Attribute Styles

- Applies only to selected characters
  - Font type, size, style
-



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# Tips

- ❑ Show hidden: ON (Alt + Shift + \*)
- ❑ Selecting
- ❑ Rulers
- ❑ Columns
- ❑ Views



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# Selecting Text

- Double click
- Triple click
- Shift + arrow keys
- Shift + home/end
- Shift + page up/page down
- "shift-click" technique

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# Applying Styles

- Paragraph styles
    - Click in text, click on style name
    - Use format painter
    - Use keyboard shortcut
  - Attribute styles
    - Select text, click on style name
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# Handy Style Shortcuts

- Heading One

- Ctrl + Alt + 1

- Heading Two

- Ctrl + Alt + 2

- Heading Three

- Ctrl + Alt + 3

- List Bullet

- Ctrl + Shift + L



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# More Keyboard Shortcuts

- Remove manual formatting = Ctrl + Spacebar
- Normal style = Ctrl + Shift + N
- Change case = Shift + F3



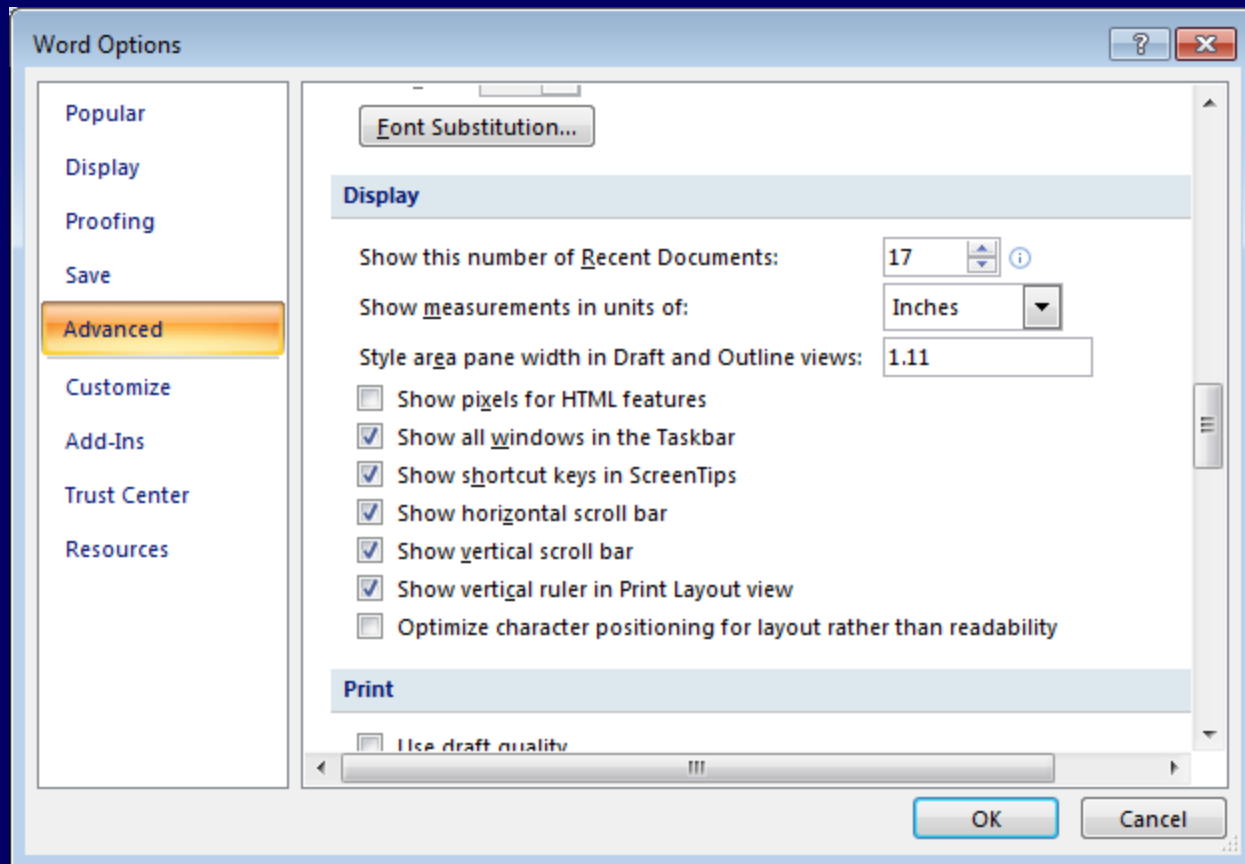
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# Seeing Styles

- Work in Draft Mode
    - View Draft
  - Turn on “Area Pane”
    - Button > Word Options
    - Advanced > Display
    - Set area pane over 1 inch
-



# Area Pane



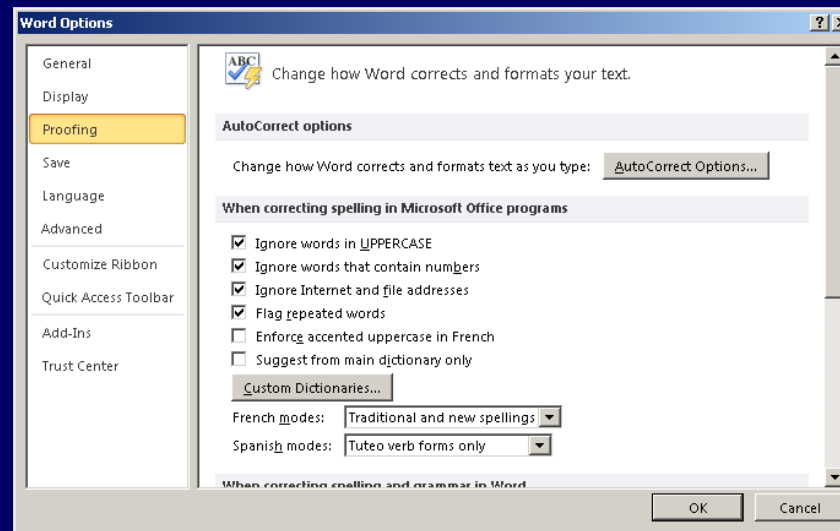


# Modifying Styles

- Styles can be modified in MS Word to change spacing, fonts, etc.
- Best NOT to modify Normal Style
  - Use Body Text if you wish to make changes
- Styles pane: Ctrl + Alt + Shift + S

# But what if I didn't...

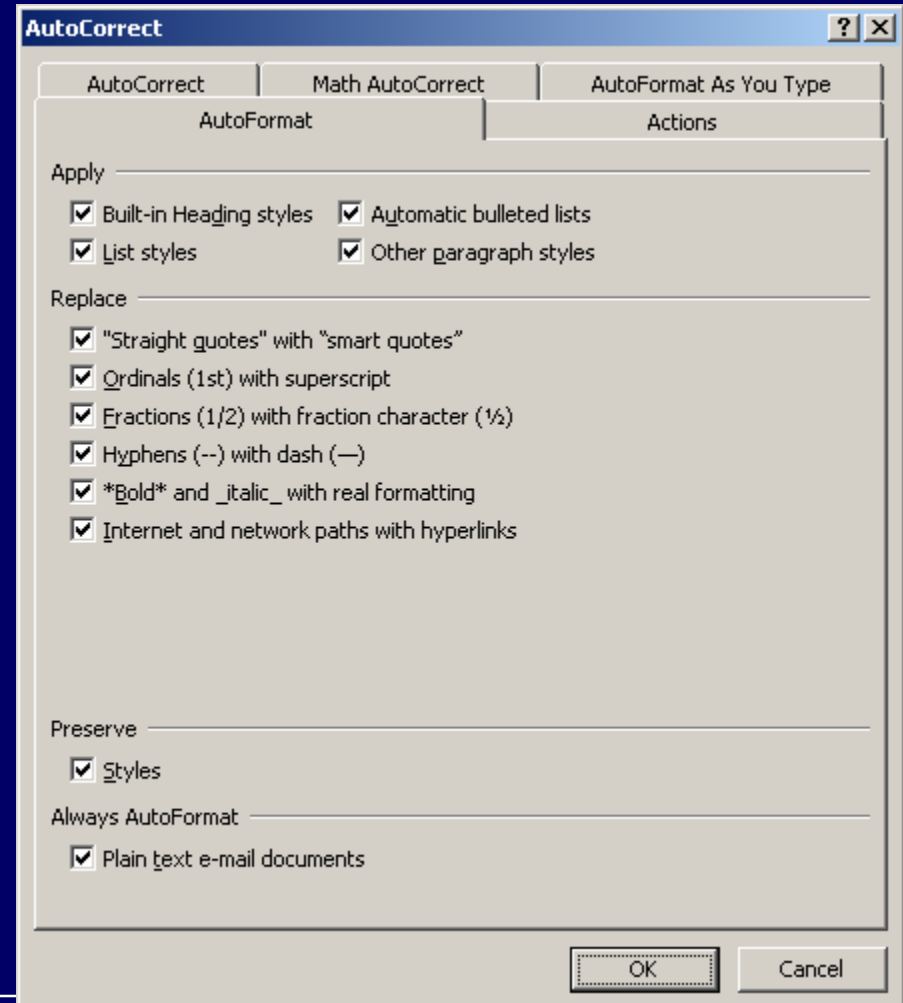
- Word can help by applying “autoformat”
- Must turn on Autoformat under File > options > Proofing > Autocorrect



# Check the Automatically Apply

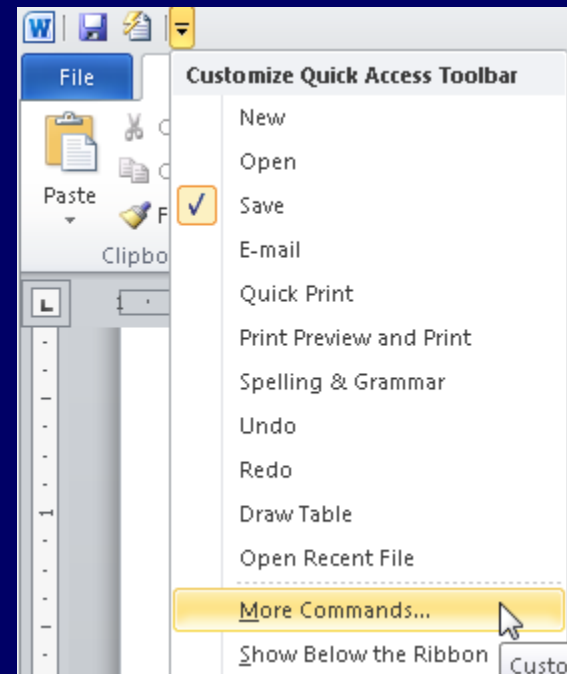
□ Check to apply styles

□ Also preserve those styles you have used



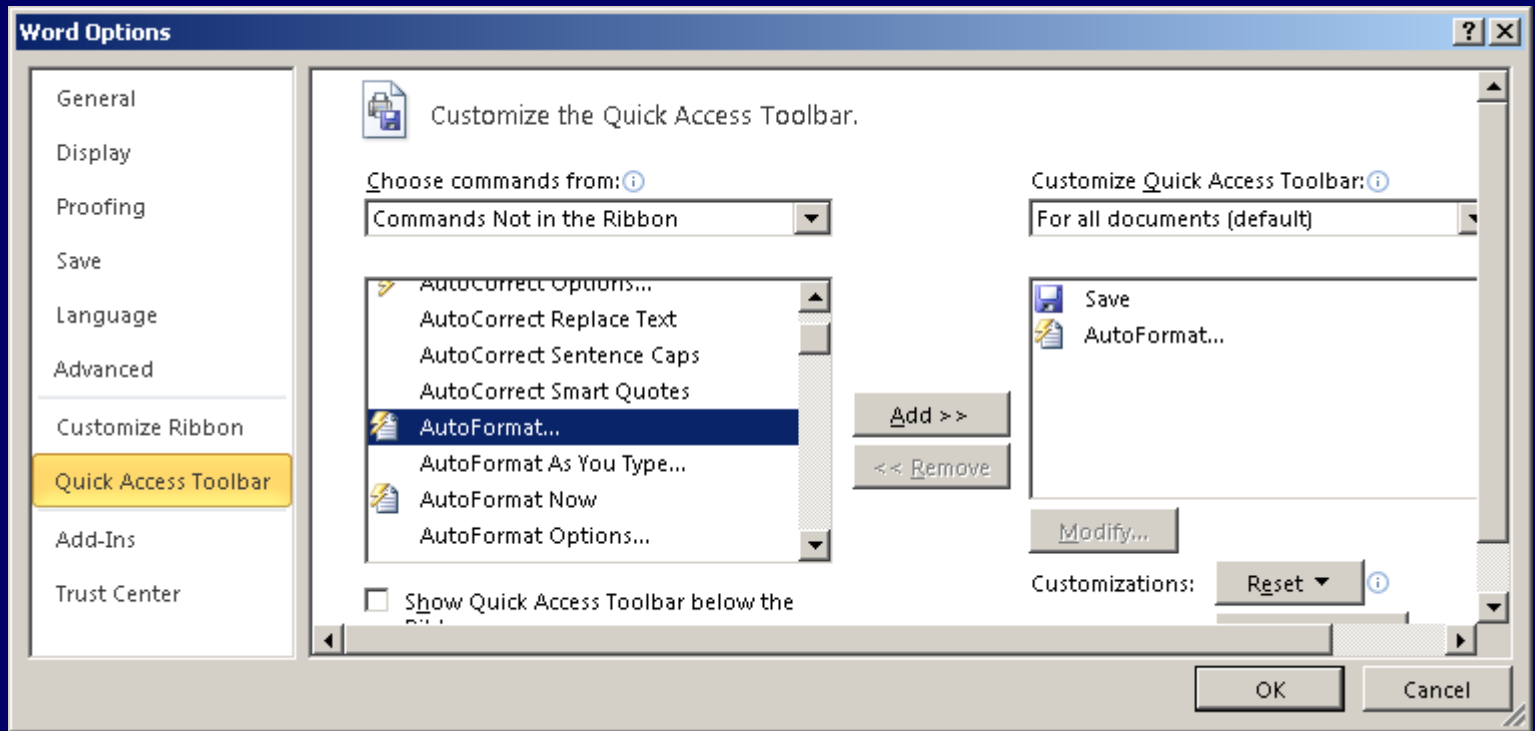
# To run autoformat...

- ❑ Must place “autoformat” on Quick Tools
- ❑ Choose Customize Quick Access Toolbar
- ❑ Select More Commands



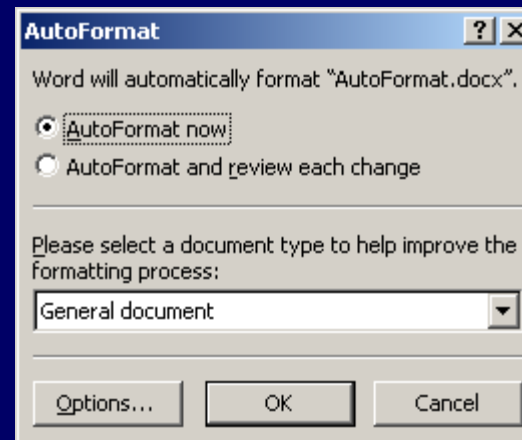
# Add Tool

- Add the “Autoformat” tool



# Run Autoformat

- Autoformat will automatically apply styles where it can





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# Once You Have Styles

- Reorder sections in “outline view”
- Click on heading and drag where you want
  - All the subheads and associated material will move along with the heading!



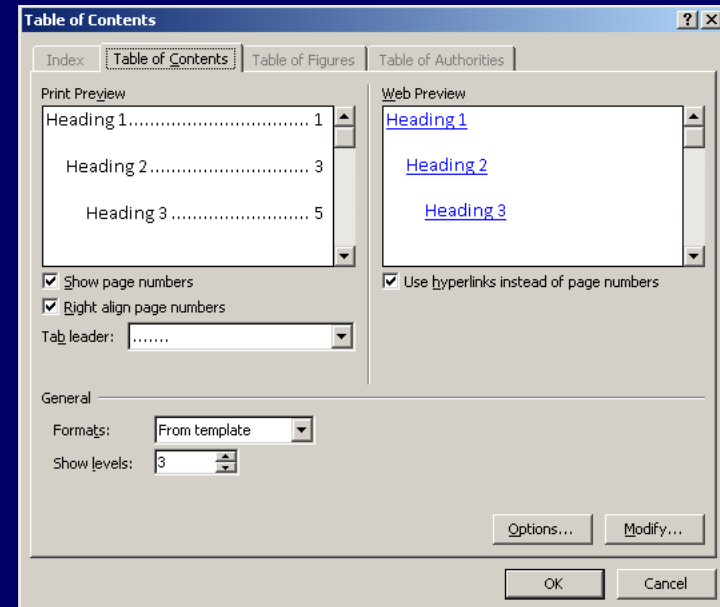
# ToC

- With styles, you can automate the table of contents generation
- Reference > Table of Contents > Insert



# Choose Levels to Include

- Have control over which levels of heading to include
- To update later, just right-click on the ToC





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# Checklist

√ **L**inks

√ **I**mages

√ **S**tyles



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# T is for Table

- Mark the header row in your tables
- Word calls this “Repeat as header row at top of every page” or just “Repeat Header Rows”
- Note: If you have column headers (i.e., header in first column), that will need to be marked in Adobe Acrobat Pro



# Benefits

## □ Benefits for you

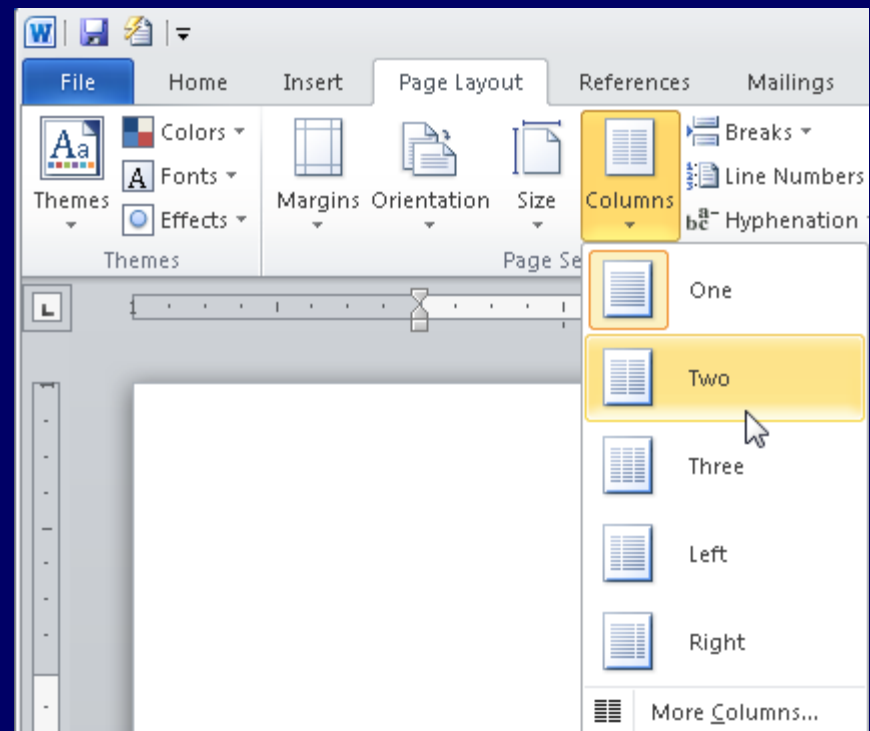
- Always see header row, even across multiple pages
- Lessens reformatting/editing issues

## □ Benefits to others

- Screen reader users will be able to hear the header text repeated as needed
- Users of large print will still see header row when enlarging text

# Avoid

- ❑ Avoid using tables just to get columns
- ❑ Instead, use the “column tool”
- ❑ Select the text and choose “columns”





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# Checklist

- √ Links
- √ Images
- √ Styles
- √ Tables

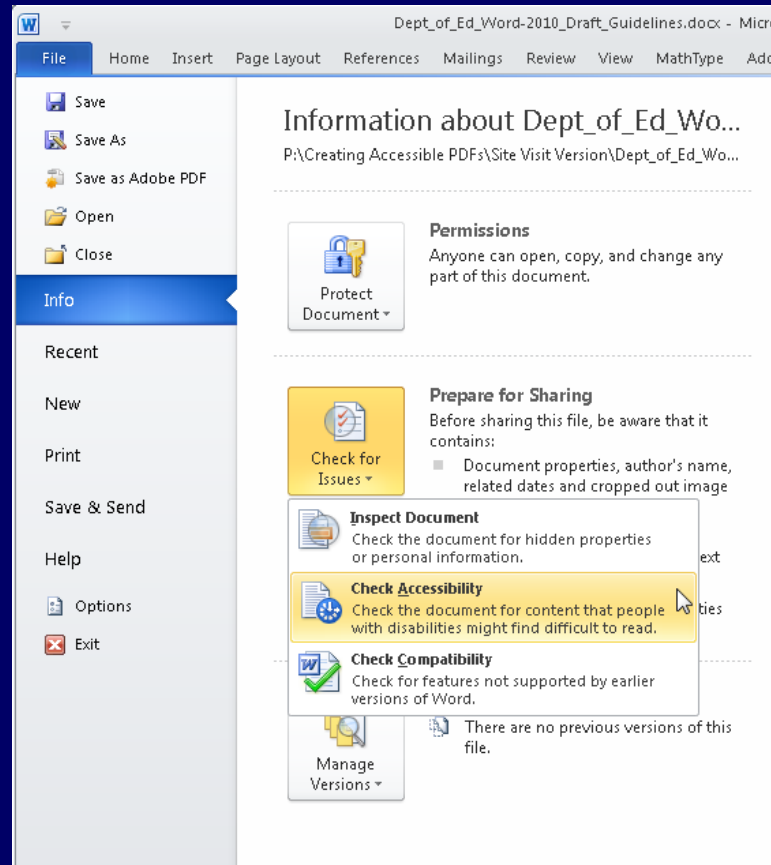
And you're done!



# TOOLS TO HELP

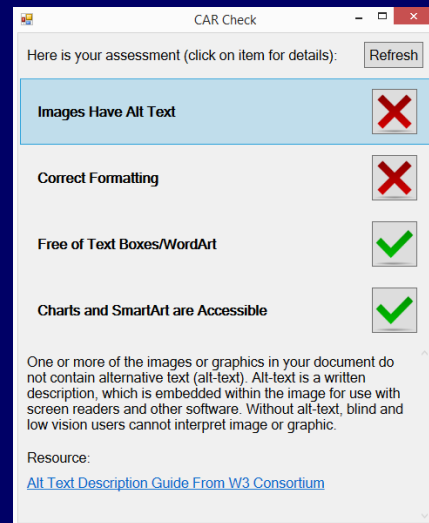


# MS Word Built-in Checker



# CAR Check

- Central Access Reader (CAR) from Central Washington University



- <http://www.cwu.edu/central-access/carcheck>



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# Central Access Toolbar (CAT)

## □ CAT Tracks

- Simplifies document creation
- <https://www.cwu.edu/central-access/toolbar>



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# Color Contrast

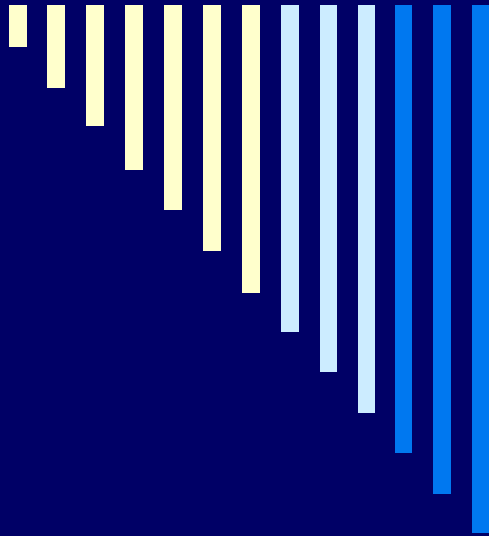
- Color Contrast Analyzer (CCA)
- <http://www.paciellogroup.com/resources/contrastanalyser/>
- Can download checker for free
  - Windows or Mac version



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# Use Color Carefully!

- Do not represent information ONLY with color
  - Use a combination of color and text/symbols
  
- Color contrast needs to be clear
  - Black on white—good
  - Yellow on white—not good



# PowerPoint





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# PPT Accessibility

## □ Themes

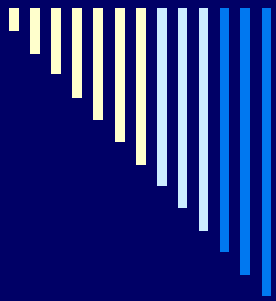
- Use built-in themes (under design tab)
- Allows user to adjust contrast as needed
- Styles are applied automatically

## □ Describe graphics

## □ Logical links

## □ Built-in accessibility checker

- File > Info > Check for issues



# Prezi

- Sorry, at this time, Prezi is not fully accessible





Others can help!

# RESOURCES

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# One Site for Free Assistance

□ @ONE: Course on accessibility for online ed

□ Sidekick

■ [www.toolsthatinspire.com](http://www.toolsthatinspire.com)

Brought to you by the California Community Colleges

**Sidekick**  
Tools that Inspire

HOME ABOUT CONTACT RESOURCES

**Welcome**  
Welcome to Sidekick, an innovative program that combines six free resources under one easy-to-access umbrella. With Sidekick, you have the tools you need to create inspiring and engaging content that meets the needs of diverse audiences, tough budgets and ever-changing regulations. Here you'll find tools that can help you inspire student success, ensure universal access, and utilize robust delivery methods to bring content to life for all students. Click on the links below to learn more, or go straight to the programs websites by clicking on their site link below. And be sure to keep checking back as Sidekick continues to grow and provide even more ways for you to become an education superhero.

**Video Welcome**

**Programs**

 <b>3C Media SOLUTIONS</b> 3C Media Tools 3C Media Website	 <b>CCC Confer</b> CCC Confer Tools CCC Confer Website	 <b>@one</b> @ONE Tools @ONE Website
 <b>TPC</b> atpc.net A.T.P.C. Tools A.T.P.C. Website	 <b>H.T.C.T.U.</b> High Tech Center Training Unit H.T.C.T.U. Tools H.T.C.T.U. Website	 <b>D.E.C.T.</b> Distance Education Captioning & Transcription D.E.C.T. Tools D.E.C.T. Website

Video player controls: Play, Stop, Previous, Next, Full Screen, CC



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# Learning from Others

## □ W3C Guidelines

- WCAG (Web Content Accessibility Guidelines) 2.0
- <http://www.w3.org/TR/WCAG20/>

## □ DO-IT (University of Washington)

- <http://www.washington.edu/doi/>

## □ WebAIM

- <http://webaim.org/>
-



# Digital Media

- DCMP Captioning Key

- <http://www.dcmp.org/captioningkey/>

- NCAM – STEM

- [http://ncam.wgbh.org/experience\\_learn/educational\\_media/stemdx/guidelines](http://ncam.wgbh.org/experience_learn/educational_media/stemdx/guidelines)

- WGBH – Web Media

- [http://ncam.wgbh.org/invent\\_build/web\\_multimedia/accessable-digital-media-guide/guideline-h-multimedia](http://ncam.wgbh.org/invent_build/web_multimedia/accessable-digital-media-guide/guideline-h-multimedia)

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# Thank you!

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