

Enhancing Learning of All: Diminishing Technology Inequities (CHHS MTI Part 2)

May 5, 2015

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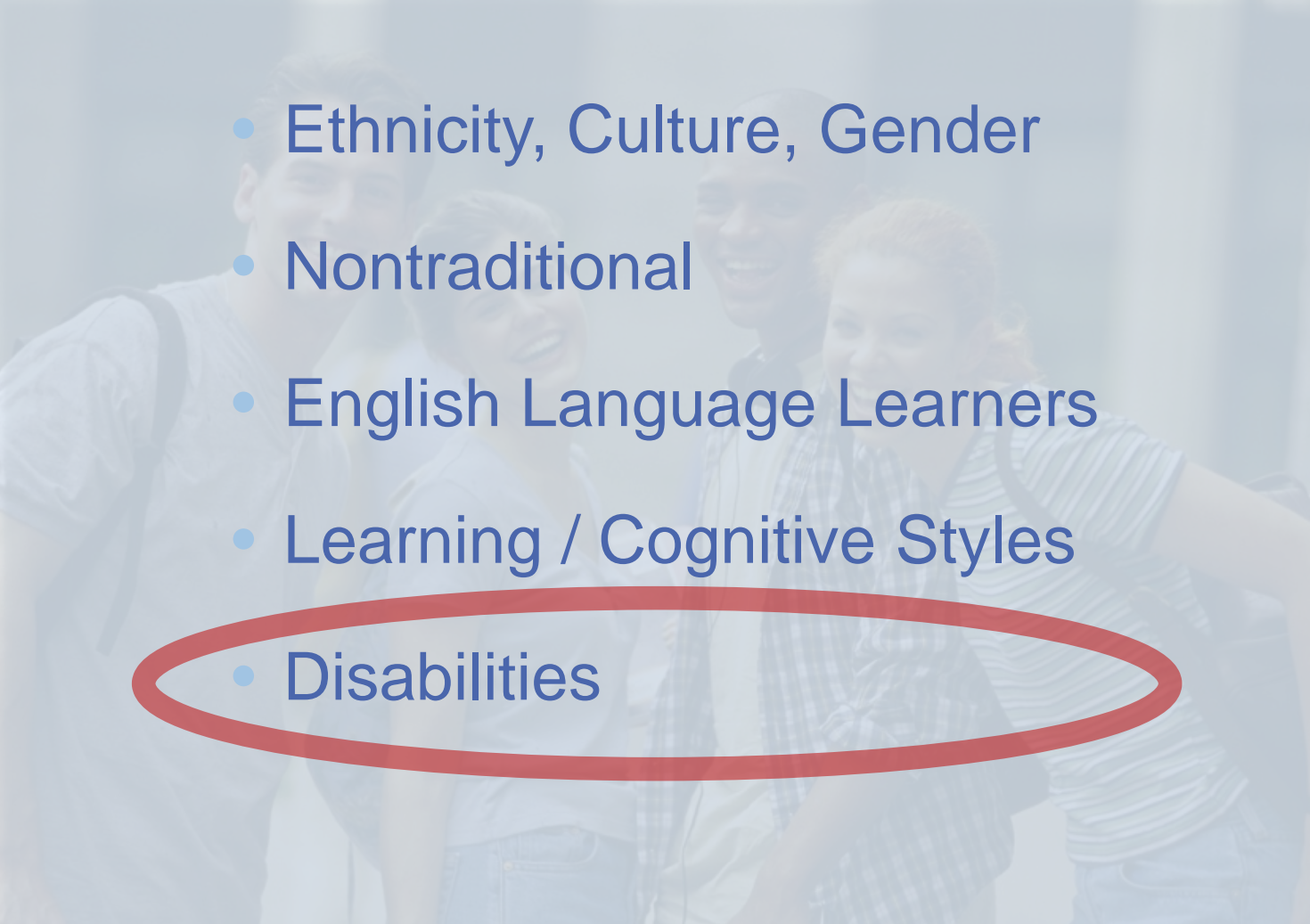
Assistive Technology Resource Center (ATRC)

- Direct Services for CSU Students & Employees with Disabilities
 - Ensure Equal Access to Technology & Electronic Information
 - Assistive Technology (AT) Assessments
 - AT Accommodations
 - AT Training
- Campus Consultation and Education
 - Accessibility & Universal Design of Mainstream & Instructional Technologies



Allison Kidd
Assistive Technology IT Coordinator
Accessibility Specialist and Trainer

Students Today Are Diverse

- 
- A group of four diverse students (two boys and two girls) are smiling and talking. The image is faded and serves as a background for the text.
- Ethnicity, Culture, Gender
 - Nontraditional
 - English Language Learners
 - Learning / Cognitive Styles
 - Disabilities

Types of Disabilities

Apparent

- Mobility Impairments
- Visual Impairments / Blindness
- Hearing Impairments / Deafness

Non-
apparent

- Learning Disabilities
- Attention Deficit Disorder (ADD/ADHD)
- Autism Spectrum Disorder
- Traumatic Brain Injury (TBI)
- Post Traumatic Stress Disorder (PTSD)
- Mental Illness

Students Use Diverse Technology

- Mobile Devices
- Text-to-Speech Software (Listening to text)
- Voice Recognition Software (Dictation)
- Literacy Support Software (Study skills, highlighting, dictionaries, etc.)
- Screen Magnification (Low vision, Mobile devices)
- Screen Reader Software (Used by students who are blind)

Universal Design in the Electronic World

- Can a wide variety of technologies interact with the electronic content?
 - **Not Automatically!**
- Content must be specifically designed to work with technology
- Adding steps to your workflow is better than scrambling to fix a problem afterwards



Review of Part 1: Top Steps for Materials that Work with Technology

1. Make PDFs Searchable

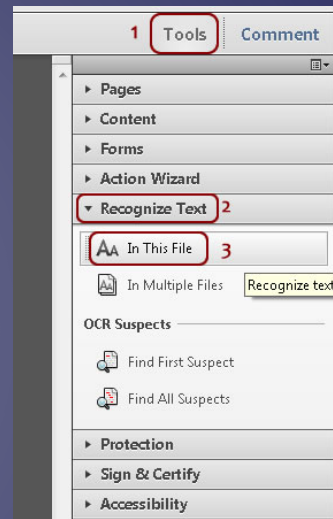
- Scanned PDFs

2. Use Headings & Layouts to Create Outline Structure

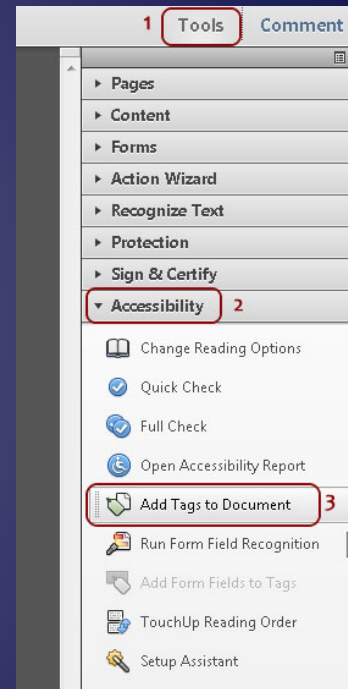
- Word
- Canvas
- Web Content
- PowerPoint

Three Steps to Searchable PDF with Adobe Acrobat Pro

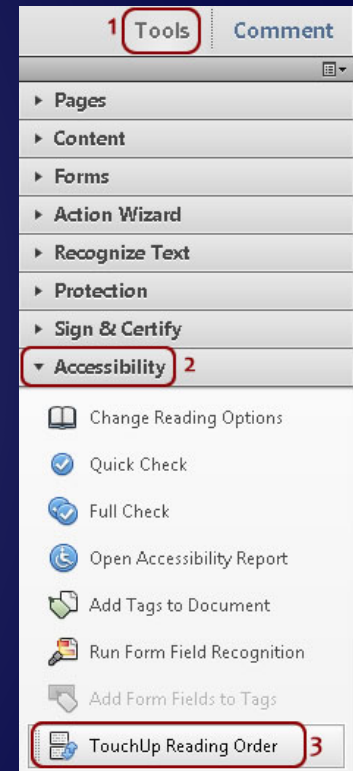
1. Use the “Text Recognition” Tool



2. Add Tags Using the Accessibility Tool



3. Check Reading Order Using the TouchUp Reading Order Tool



4. Save Changes

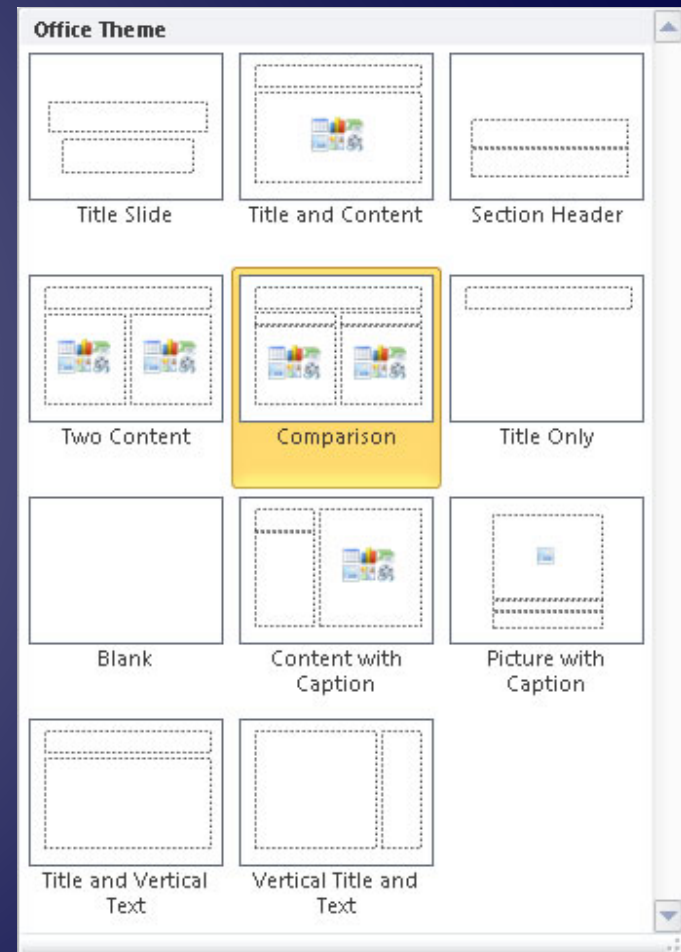
Use Headings and Styles in Word



- Headings Automatically Generate Table of Contents
 - Students can skip to a section
 - Provides visual cues to importance levels
 - Screen reader users can listen to a list of headings to navigate

Use Slide Layouts in PowerPoint

- Use Slide Layouts instead of drawing text boxes
- Give Every Slide a Unique Title
 - Generates Table of Contents
 - Check Your Outline View
- Caution: If you add Text Boxes, slide reading order needs to be checked using **Home > Arrange > Selection Pane**
 - Screen readers may not detect content in text boxes



Part 2: Top Steps for Listeners

1. Check Reading Order

- PowerPoint
- PDF

2. Provide Descriptive Alternate Text for:

- Images, Graphs, Charts
- Links
- Video or Content (Captions)

3. Settings in MS Office Before Conversion to PDF

- Saves accessibility features from the original document into the PDF

Demo PDF Reading Order

- Using text-to-speech software, Read & Write Gold.

Hands On: PowerPoint to PDF

- Check the Reading Order of PowerPoint Slides
 - Home > Arrange > Selection Pane
 - ****Reading Order is from Bottom to Top in PPT Only!**
- Configure the Acrobat Plugin
 - **“Enable Accessibility and Reflow with Tagged Adobe PDF”** in Plugin Preferences
- Use **“Save As PDF”** or **“Create PDF”**
 - Avoid Printing to Adobe PDF in the Printers List!

Hands-On: Check the Reading Order of PDFs

- After PDF creation open the PDF with Acrobat Professional
- Open the Accessibility Toolbar
 - View > Tools > Accessibility
- Click on “TouchUp Reading Order”
- Click on “Show Order Panel”
- Drag items into the correct order in the Order Panel
- Save Changes

Demo Alternative Text for Images

Using JAWS, a popular screen reader

- Navigate using headings
- Listen to images

Writing Good Alt Text for Images

Consider Context. Ask yourself...

- What is the purpose of this image?
- If the image were removed, how would I convey the information using text?

Other Tips...

- Avoid redundant descriptions (e.g. “Image of”)
- Avoid repeating the text already surrounding the image
- Be concise

Context is Key

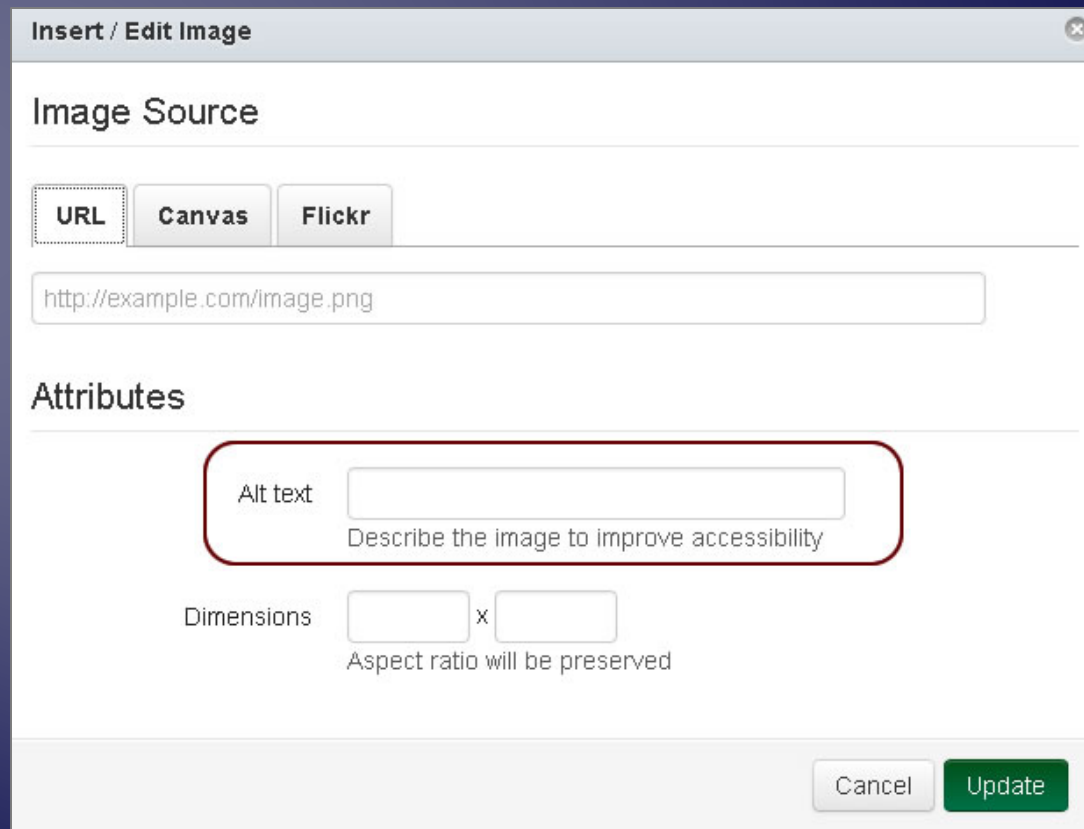
Consider the following image. How would the alt text change if the image is used for...



- Ice Cream Manufacturer
- Girl Scouts of America
- Diversity Website

Adding Alt Text in Canvas

When you insert an image in Canvas, add the text description in the “Alt text” box provided



The image shows a dialog box titled "Insert / Edit Image" with a close button in the top right corner. The dialog is divided into two main sections: "Image Source" and "Attributes".

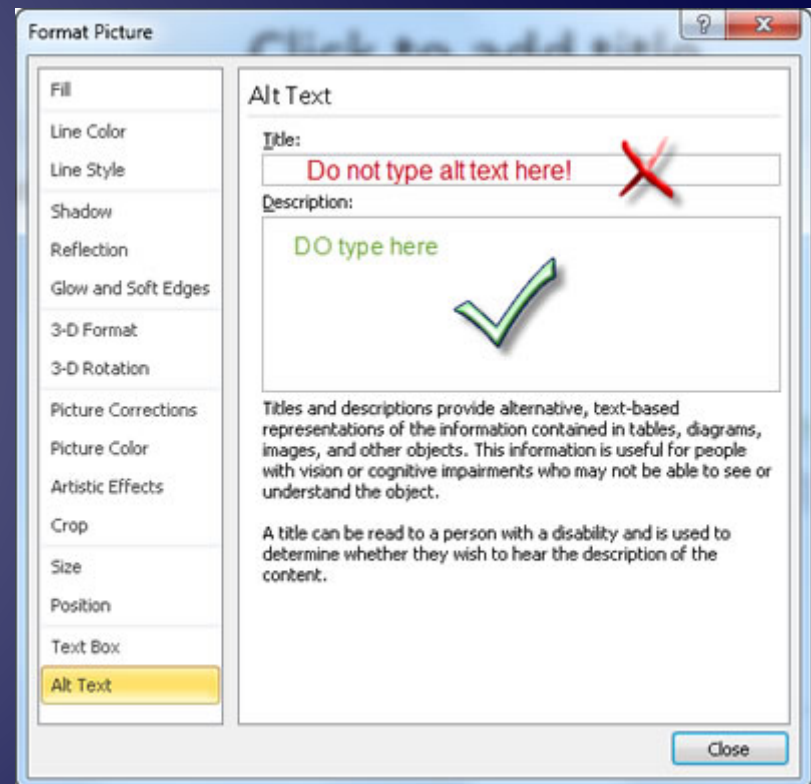
Image Source: This section contains three buttons: "URL", "Canvas", and "Flickr". The "URL" button is currently selected. Below the buttons is a text input field containing the URL "http://example.com/image.png".

Attributes: This section contains an "Alt text" label followed by a text input field. The input field is highlighted with a red rounded rectangle. Below the input field is the text "Describe the image to improve accessibility". Below this is a "Dimensions" label followed by two input fields separated by an "x" symbol, with the text "Aspect ratio will be preserved" below them.

At the bottom right of the dialog are two buttons: "Cancel" and "Update".

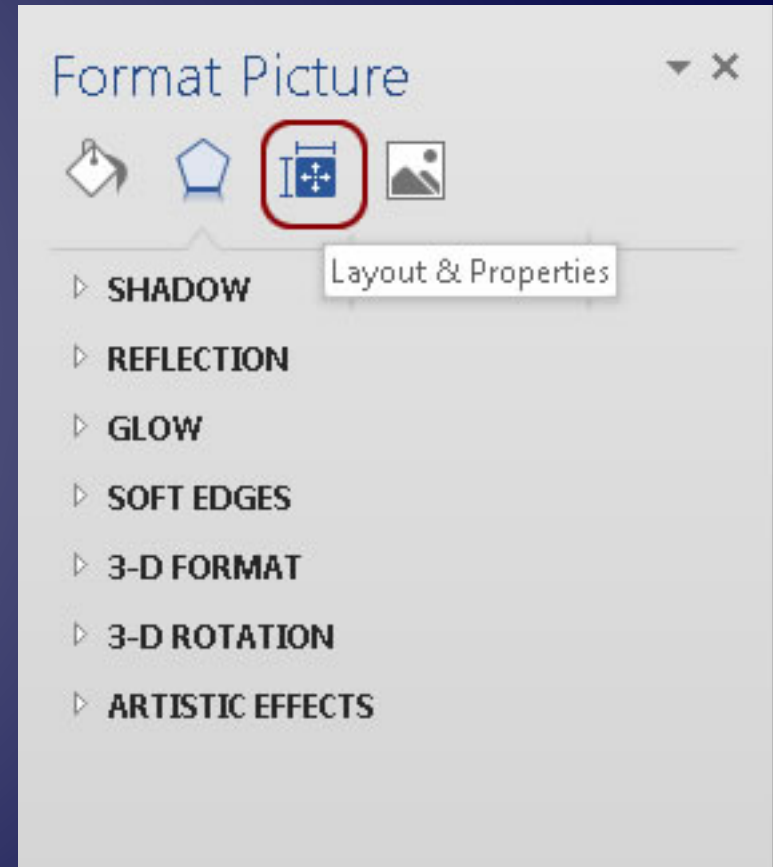
Adding Alt Text in Office 2010

- Right-Click on Image to Format Picture or Format Shape
- Select Alt Text menu
- Add the text in the Description field



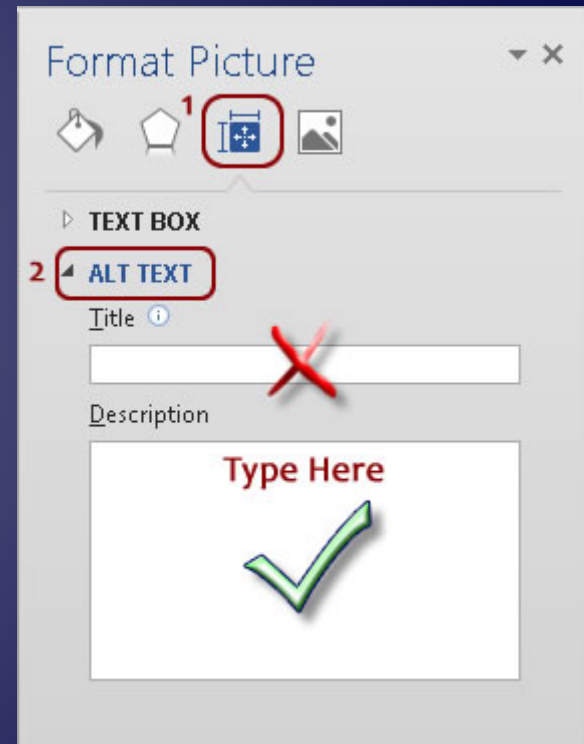
Hands On: Adding Alt Text in Office 2013

- Right-Click on Image to “Format Picture” or Format Shape
- Click on the 3rd Icon, “Layout & Properties”



Adding Alt Text in Office 2013, Part 2

- Click on “ALT TEXT” to expand the menu
- Type in the **Description** field (not the Title)



Thank You!

CSU Online Resource featuring today's materials and more:

Accessibility By Design Website

<http://accessibility.colostate.edu>

Other Online Tutorials and Resources

The Access Project (Step-by-Step Tutorials)

<http://accessproject.colostate.edu/udl>

WebAIM Tutorials

<http://webaim.org>

Atomic Learning

<http://www.atomiclearning.com/highed/>

Short Video Tutorials – Login Required (Contact ATRC for Access)

Information on ATRC Services and Presentations

- ATRC Presentations (<http://atrc.colostate.edu/presentations.aspx>)
- Quick Start Guides (<http://atrc.colostate.edu/1quickstart-guides.aspx>)