



OER & Accessibility

Norah Sinclair
AMAC Accessibility Solutions and Research Center
College of Architecture
Georgia Institute of Technology

www.amacusg.org

AMAC Accessibility



AMAC is as an initiative of the University System of Georgia - Board of Regents to help post-secondary disability services offices provide complete, timely, and efficient accommodations to the print-disabled students they serve.



Products and Services



- **Braille Services** produces customized projects from both print materials and electronic text including partial books and chapters or graphics only using cutting-edge technology.
- **Professional E-Text Producers** provide high-quality e-text in many formats such as PDF, DOC, DAISY, and HTML, MathML.
- **Captioning Services – including Remote Captioning, Captioned Media, and Audio Description** makes classrooms, meetings, labs and other audio environments accessible for deaf or hard-of-hearing.
- **Certified Assistive Technology team** provides on-site and remote assessments, demonstrations, training and technical assistance for education, work, and daily living environments.
- **Accessibility Compliance** focuses on organizational accessibility needs with evaluation, technical assistance, customer support, and website accessibility.

How does AMAC work for Students?



What is AMAC?

AMAC works with colleges and universities to provide students with textbooks in formats that best meet their needs, including:

E-Text, Audiobooks, and Braille.

How does AMAC work?

Students meet with their disability services office to place an order for their textbooks in the preferred format.



AccessGA Initiative



AccessGA

A joint initiative of the Georgia ADA Coordinator's Office, AMAC, and GTA. The objective is to support Georgia's state agencies with ICT accessibility, and promote equal and timely access for employees and customers with a wide range of disabilities.

- Webinar
- Technical Assistance and Hands-On Training
- Monthly Newsletters
- Up-to-Date Wiki of ICT Accessibility Resources and Information
- Web Accessibility Audits
- Procurement and VPATs
- www.accessga.org



Laws and Regulations



[ADA The Americans with Disabilities Act](#) of 1990 protects qualified persons with disabilities from discrimination including in postsecondary education.

- **Postsecondary institutions must make reasonable accommodations** in order to provide students with disabilities an equal opportunity to participate in courses, programs, and activities.
- Accommodations can include aids and services such as qualified sign language interpreters, note takers, readers, braille, large print, and **electronic formats of print materials**, and adaptive equipment.



[US Department of Education Disability Discrimination: Overview of the Laws](#)

Civil Rights



Section 504

Section 504 of the Rehabilitation Act of 1973 is a federal law designed to protect the rights of individuals with disabilities in programs and activities that receive **Federal financial assistance** from the U.S. Department of Education (ED). Section 504 provides: "No otherwise qualified individual with a disability in the United States . . . **shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance**"

[Higher Education's Obligations Under Section 504 and Title II of the ADA](#)

Qualified Individuals

Students must self-identify to receive accommodations.



Who is included?

Individuals with print-related disabilities:

- Blind or visually impaired
- Motor disabilities
- *Learning disabilities – largest group of students served in GA
- Deaf or hard of hearing and require multimedia to be captioned
- Secondary group that can benefit – English language learners



Is Your Textbook Accessible?

Accessibility / Accessible

Making your content available to all users, including users of assistive technology.



What Makes a Textbook Accessible?

Key Ideas

- Works with Assistive Technology
- Benefits all users
- Incorporates standards
 - Section 508 and WCAG 2.0



Screen Reading/Text-to-Speech Solutions



- JAWS, NVDA, Window-Eyes
- Built-in Solutions: Narrator, VoiceOver
- ClaroRead, Kurzweil 3000
- Kindle App and Devices
- VoiceOver
- TalkBack
- ClaroSpeak, Voice Dream - apps

What is an Accessible Textbook?



- **Text** – selected, reformatted, resized, accessed with Assistive Technology
- **Digital** – not hard copy printed
- Include **Document Structure** and **Navigation – Headings** and Table of Contents
- **Alternative Text Descriptions**
- **Labels** for tables and forms
- Multimedia includes **captions**
- Works for most users
- Improved **Accessibility** leads to improved **Usability**

Accessible Documents Features

Semantic Markup, Document Structure, and Navigation

- **Headings** for structure and navigation
- **Alternative text descriptions**
- **Meaningful hyperlinks** (not click here or read more)
- **Logical reading order**
- **Color and Contrast**
- **Lists and tables**



Headings

The screenshot displays the Microsoft Word 2010 interface. The ribbon is set to the 'View' tab, with the 'Navigation Pane' checkbox checked. The 'Navigation' pane on the left shows a search for 'Tips for a More Accessible MS Word Doc' with several results, including 'Use Styles and Headings to add document structure'. The main document area contains the following text:

Tips for a More Accessible MS Word Doc

Documents that are designed using accessibility standards and guidelines are beneficial for all users. Accessibility considerations include: document structure and navigation, alternative text descriptions, accurate reading order, and appropriate color and contrast. Digital content accessibility guidelines are very similar to the guidelines and standards for ensuring web content is accessible, however the techniques to achieve accessibility will vary depending on the format of the document. A key technique for creating more accessible Microsoft Word documents is to create document structure and navigation by using Styles to format Headings.

Use Styles and Headings to add document structure

Adding headings and subheadings (Heading 1, Heading 2, Heading 3, etc.) in a logical order will assist all users in navigating and finding information. Headings will be visibly identified in the body of the document by their formatting, but are also viewable and can aid navigation in the Navigation pane.

To View the Navigation Pane:

In Word 2010, on the Word Ribbon, go to View tab and click the checkbox by Navigation Pane in the Show group. (In Word 2007 click, show Document Map)

The status bar at the bottom indicates 'Page: 1 of 11', 'Words: 1,297', and 'English (U.S.)'. The bottom right corner shows the 'EasyProducer' toolbar with navigation buttons for 'Previous', 'Play', and 'Next'.

Alt Text

Alternative Text Descriptions

Images and other non-text content require text “equivalents” in order for screen reader users to have access to the same information that is conveyed visually to sighted users.

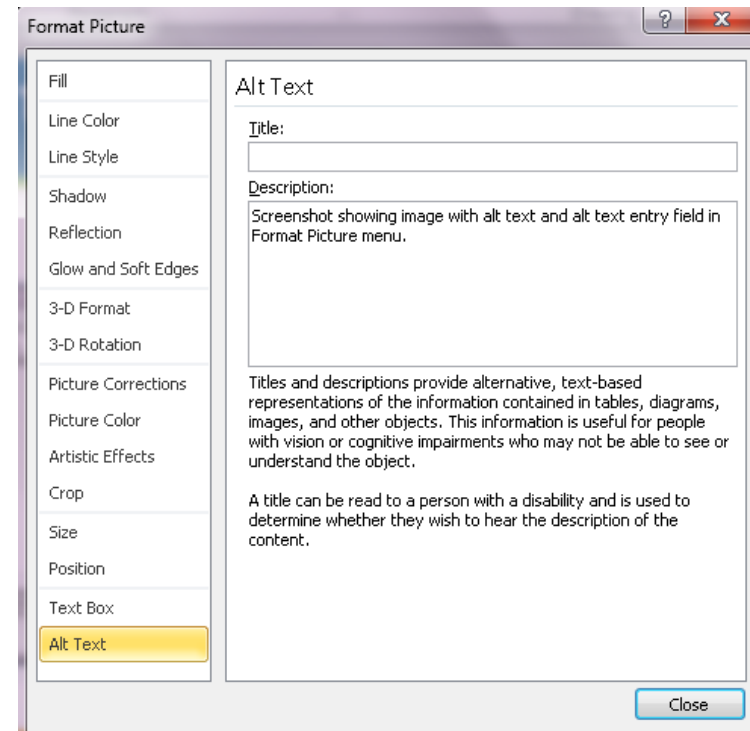
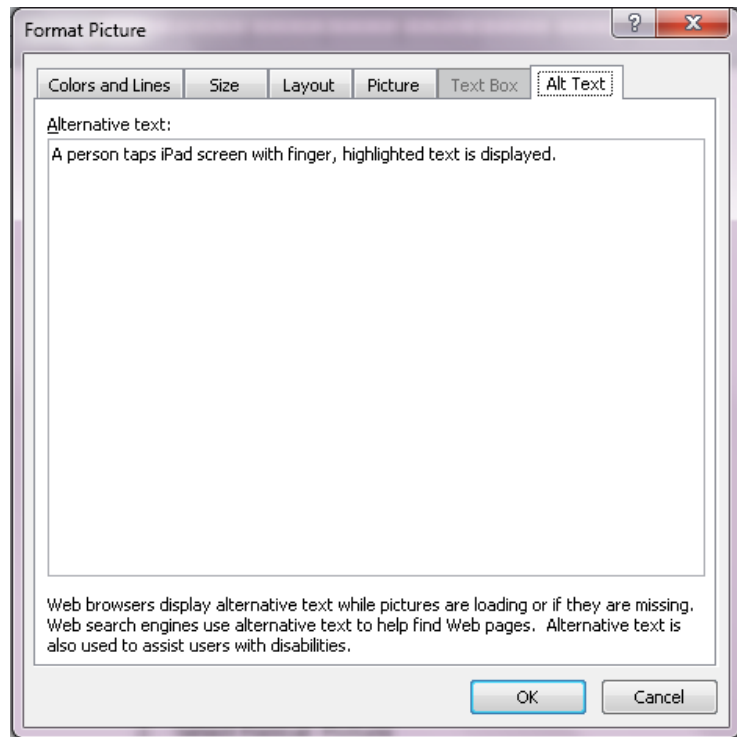


A person taps iPad screen with finger, highlighted text is displayed.

Writing Alt Text Descriptions

Image Purpose

To determine the alt text to add, determine the purpose and meaning of the image and write a short, to-the-point text equivalent. In most cases the alt text conveys the meaning of the image, rather than a visual description of the image.



Accessible Digital Content

Formats

- Microsoft Word documents
- PowerPoint presentations
- Accessible PDFs from accessible source documents



Built-in Tools

Use the built in tools of your authoring software

- Headings
- Lists and tables
- Alternative text descriptions
- Meaningful hyperlinks



Accessibility Checker

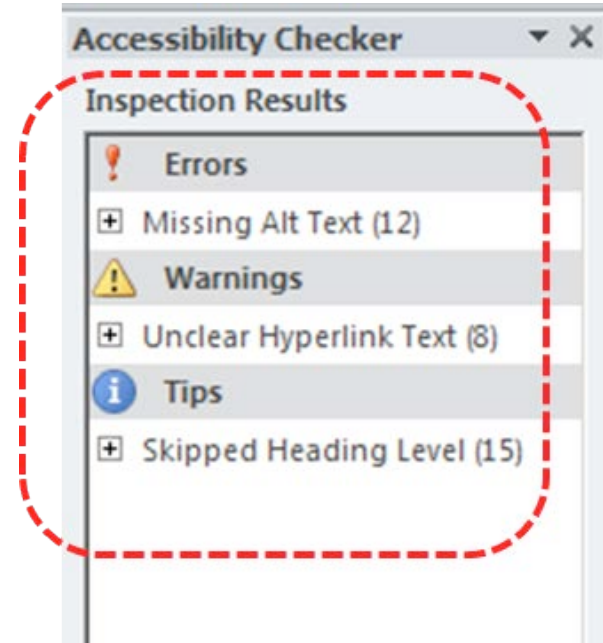
Use the built in tools of your authoring software

- What is it?
 - A tool available in Microsoft Office 2010 and 2013 for Word, PowerPoint, and Excel that identifies areas within documents that may be problematic for users with disabilities to view or use.



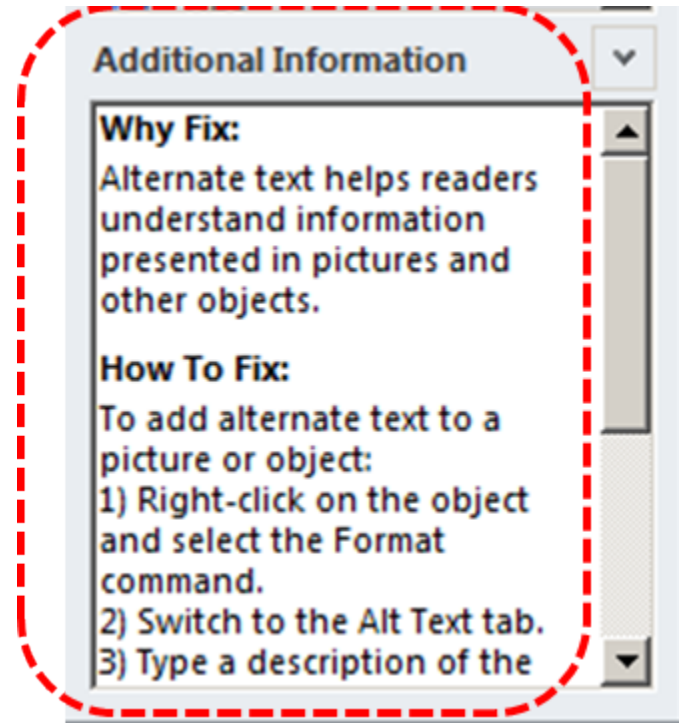
Inspection Results

- What does it do?
 - Inspects the document and scans for issues that could pose problems.
 - Generates a report showing the inspection results.
 - Flags three different categories of issues: errors, warnings, and tips.



Additional Inspection Information

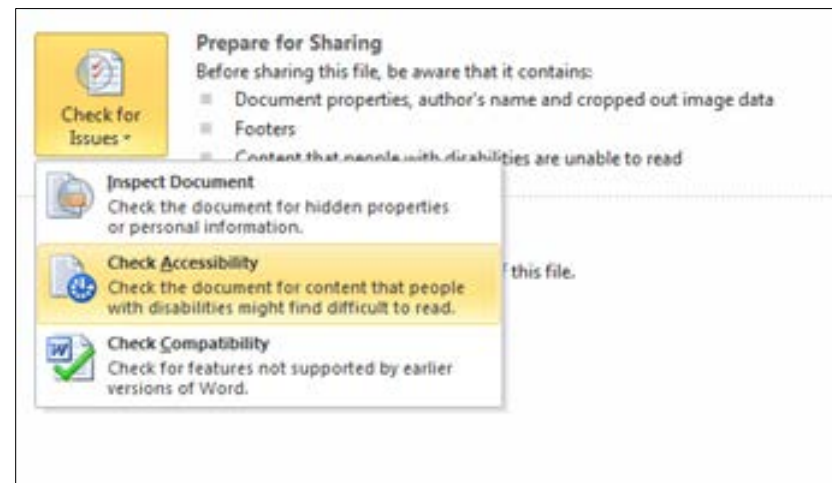
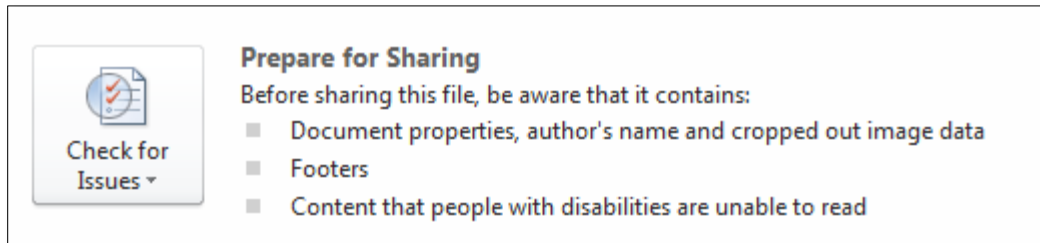
- What else does it do?
 - Why Fix: Provides additional information detailing why the issue should be fixed.
 - How To Fix: Provides instructions for fixing the problems.



Use the Accessibility Checker

To access the Accessibility Checker, go to File > **Prepare for Sharing** and click **Check for Issues**

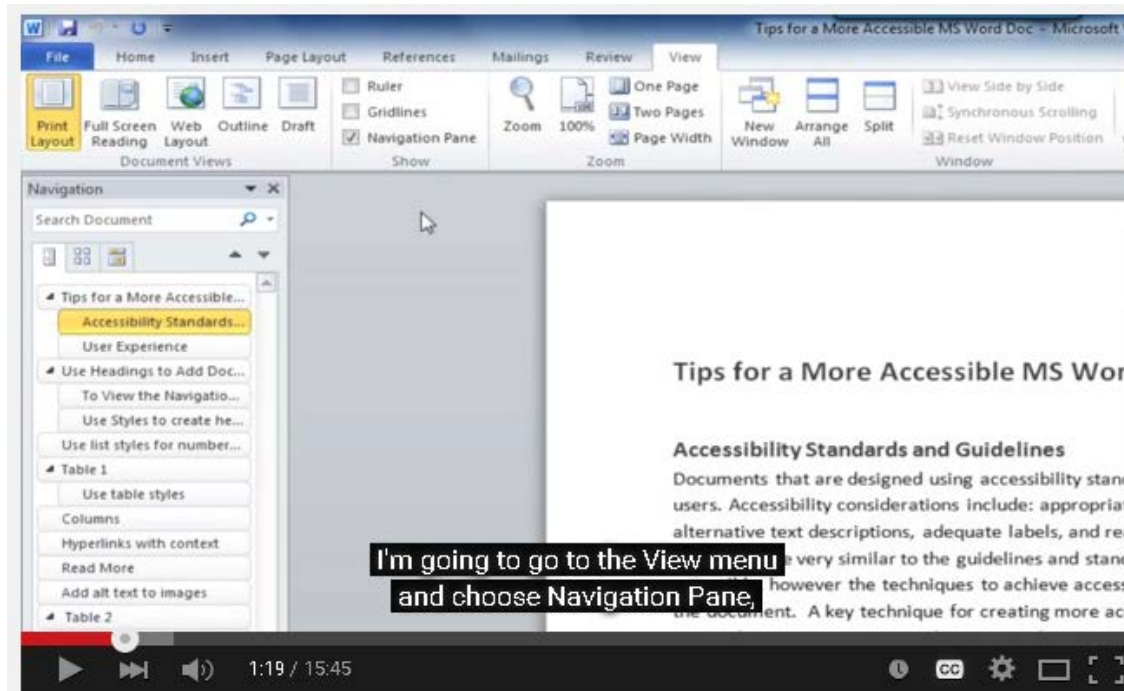
From the context menu, choose **Check Accessibility**



Use same standards and general techniques across formats

- MS Word Doc
 - PDF
 - EPUB
 - Html
 - xhtml
 - xml
-
- Accessible source documents can be exported to other formats.

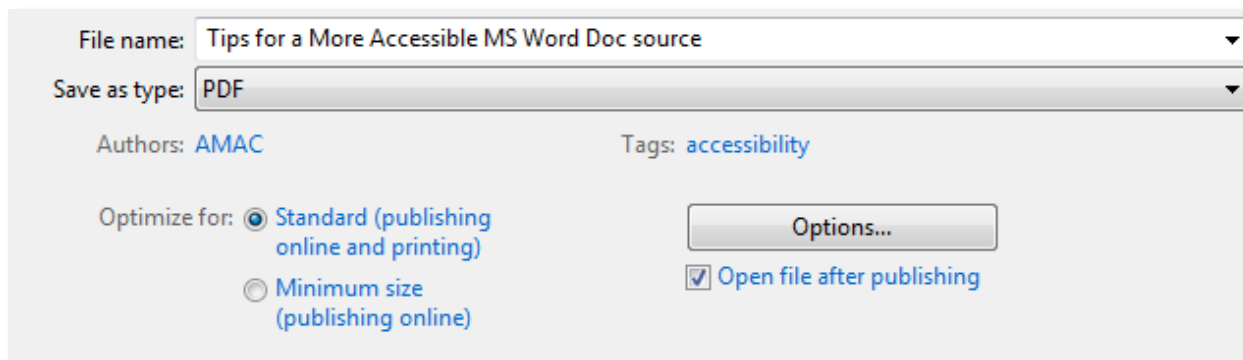
MS Word Demonstration



[Tips for More Accessible Microsoft Word Doc](#)

PDFs

- Create Accessible PDFs from accessible source files.
- Export tagged PDFs.



File name: Tips for a More Accessible MS Word Doc source

Save as type: PDF

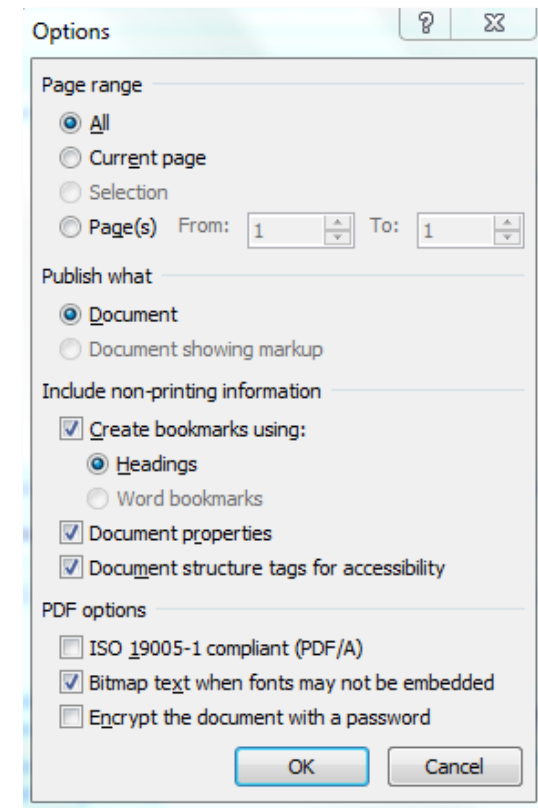
Authors: AMAC

Tags: accessibility

Optimize for: Standard (publishing online and printing)
 Minimum size (publishing online)

Options...

Open file after publishing



Options

Page range

All
 Current page
 Selection
 Page(s) From: 1 To: 1

Publish what

Document
 Document showing markup

Include non-printing information

Create bookmarks using:
 Headings
 Word bookmarks

Document properties
 Document structure tags for accessibility

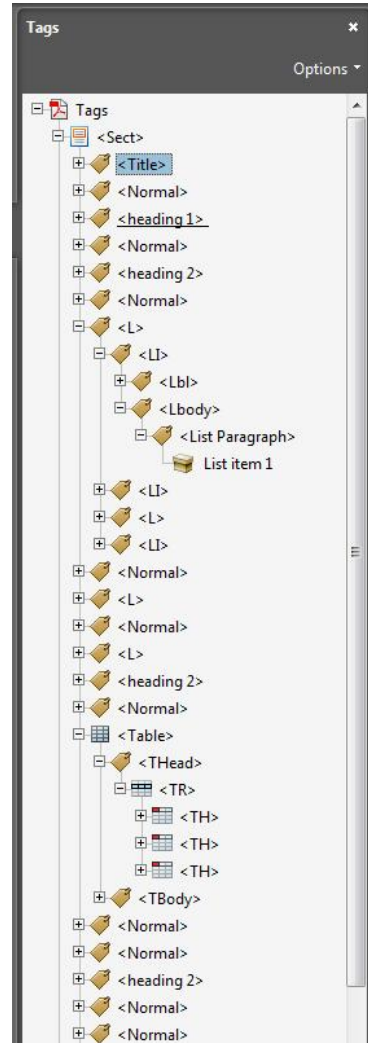
PDF options

ISO 19005-1 compliant (PDF/A)
 Bitmap text when fonts may not be embedded
 Encrypt the document with a password

OK Cancel

Remediating PDFs

- Adobe Acrobat Professional
- Auto-tag



Test document

This document is intended to test the quantity of the styles and elements as I usually use.

Main heading

Some more text.

Lists

Get ready for some other elements, first

- List item 1
- List item 2
 - Sub item 1
- List item 3

A numbered list, from the numbering button

1. Numbered item 1
2. Numbered item 2
 - a. Sub item 1 (using tab)
3. Numbered item 3

Trying the new multi-level list button:

- 1) Item one.
 - a) Sub item (using tab)
- 2) Item two.
- 3) Item three.

Table

Coffee and tea consumption per day:

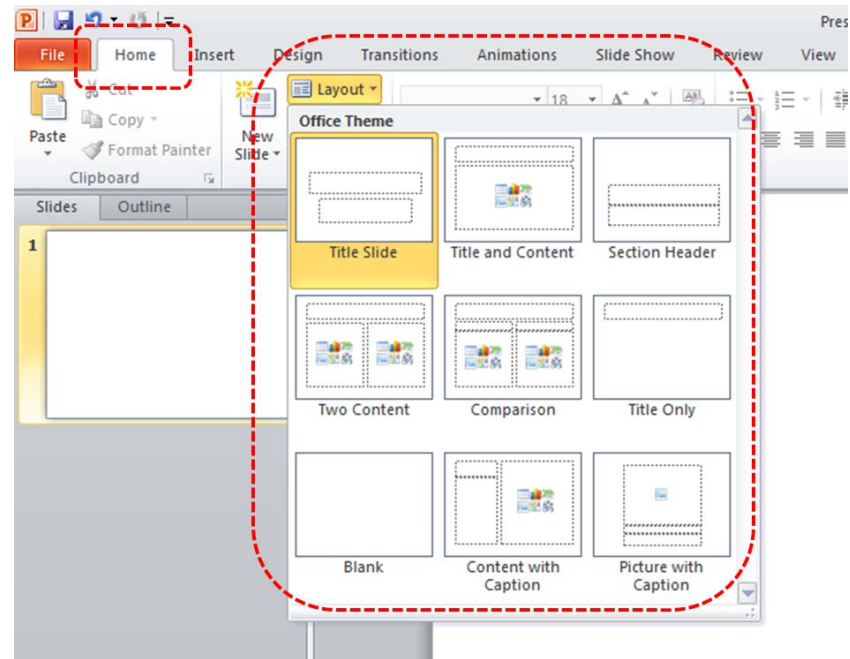
Supplementary Materials

PowerPoint Slides

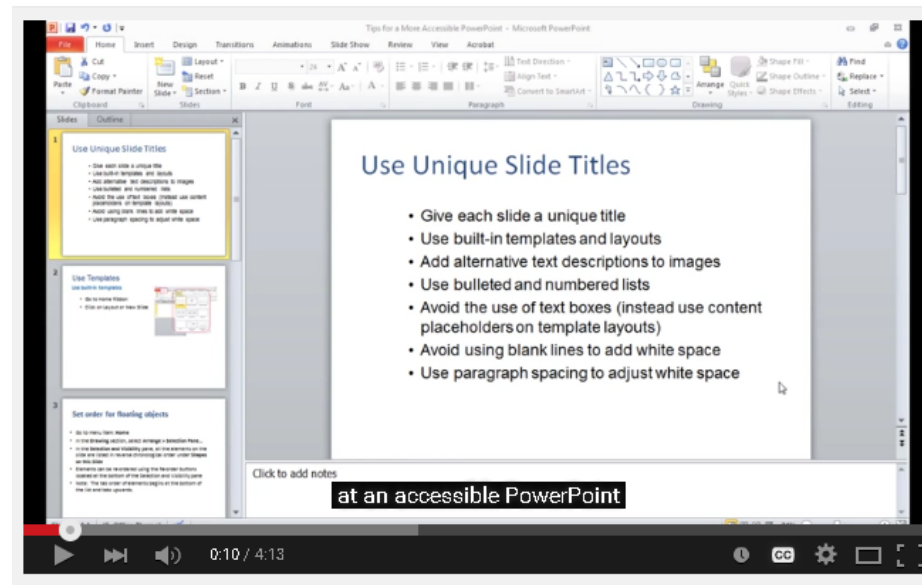
- Templates
- Unique titles
- Reading order
- Outline view
- Export to PDF

Multimedia and Video

- Closed Captioned



PowerPoint Demo



[Video demonstration how to format PowerPoint for improved accessibility](#)

Universal Design



Design for all users / Build it in from the start

- Build accessibility into source documents.
- Make accessibility part of your workflow.
- Documents designed using accessibility standards translate to mobile and other platforms more easily.

Demonstration of JAWS on the Web



**Demonstration of JAWS by a student who is blind
accessing the Internet**

[Video of JAWS User Accessing the Internet](#)

Access to Success



Finding the right tools leads to success



[Annzie Hine Success Story](#)

Contact



Norah Sinclair

norah.sinclair@amac.gatech.edu

AccessGA

www.accessga.org

AMAC Accessibility Solutions and Research Center

www.amacusg.org

404-894-8000

Resources



- [Creating Accessible MS Word Documents](#)
- [Adobe Indesign Character and Paragraph Syles](#)
- [PDF Accessibility Standards](#)
- [NCAM Image Description Resources](#)
- [WCAG 2.0 Guidelines Overview](#)