

The Accessible Website



Objectives

By the end of the webinar, participants will:

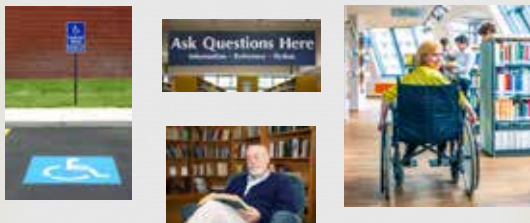
- Understand online accessibility issues
- Know about accessibility tools for checking websites and content
- Have a starting point for creating accessible content



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The Physical Presence



The Library's Virtual Front Door

- Communication, promotion
- Current information, services, resources



Our Users



- Who is the library for?
 - Everyone, not just the ones with good vision, hearing, & mobility!



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The Library's Virtual Presence: Is it User Friendly?



Poll - Where Are You Now?

How far along are efforts to make site accessible?

- Not sure; I'm not involved in website development
- Just starting to think about it
- We have a plan, but haven't started implementing yet
- We are currently implementing
- We are done and fully compliant!

Acronyms and Terms



- Organizations
 - WebAIM (Web Accessibility in Mind)
 - W3C (World Wide Web Consortium)
 - NCDAAE (National Center on Disability and Access to Education)
- WAI (Web Accessibility Initiative)
- WCAG (Web Content Accessibility Guidelines)
- Section 508 (law)

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What is Section 508?



Federally-funded organizations must comply with the law

- Section 508 of the Rehabilitation Act (29 U.S.C. 794d), as amended by the Workforce Investment Act of 1998 (P.L.105-220), August 7, 1998.



www.section508.gov/index.cfm?fuseAction=1998Amend

In a Nutshell



When seeking information or services from a Federal department or agency, people with disabilities must have access and use of information that is comparable to that of people without disabilities



But We Aren't a Federal Agency

Many public agencies, including libraries, are choosing to be as accessible as possible to all users.

It's the right thing to do. In the United States:

- 6.4 million people have a visual disability
- 10.3 million people have a hearing disability
- 19.5 million people have an ambulatory disability.
- 13.8 million people have a cognitive disability.

Any way you look at it, millions of people in the United States have at least one disability that Section 508 is meant to address.

2010 Disability Status Report: United States Erickson, W., et al. (2012)
<http://digitalcommons.ilr.cornell.edu/gladnetcollect/558/>

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Consider the User Experience (Walk a Mile in Their Shoes)



Conditions that make access to web content difficult

- Low vision or blindness
- Hearing loss or deafness
- Mobility issues
- Other issues



Accessibility: Technologies + Practices

Technologies	Practices
<ul style="list-style-type: none">• Screen readers• Video captions• Text-to-voice• Assistive devices• A keyboard	<ul style="list-style-type: none">• Good web design practices• Good document design• Administrative policies• Commitment• Staff training

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Elements of Accessibility



- ✓ Many elements are the same for webpages, documents and other files.
- ✓ Learn the basic concepts; apply across all content
- ✓ Make accessibility a natural part of the workflow
- ✓ Accessibility doesn't happen by chance - build it in to all online content

Required Page Elements: Alt Text

Text equivalents for images and non-text objects



```
<p></p>
```

Required Page Elements: Hyperlinks



Hyperlinks (meaningful text displayed)



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Table Formatting

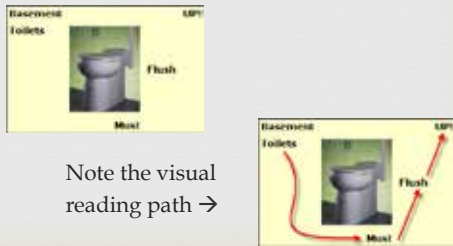


- Need row and column headers
- No blank cells
- Logical order when navigating based on table content (left to right, top to bottom)
- In documents, use the Insert Table function rather than copying and pasting

Table Issues



This table was created for visual effect:



Note the visual reading path →

Reading Order



The screen reader will read left to right, down and across. The user will hear or feel via Braille: "Basement UP! Toilets Flush Must"

Creating Accessible Tables, WebAIM
<http://webaim.org/techniques/tables/>

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Required Page Elements: A Few More

- Video needs to be synchronized with equivalent alternative (captioning)
- Audio needs a written equivalent (transcript)

NLM Director's Comments Podcasts

MedlinePlus provides a weekly audio update by Donald A.P. Lindberg, M.D., Director of the National Library of Medicine regarding health news and accompanying information from MedlinePlus.

TITLE	DATE	AUDIO	TEXT VERSION
2011 MedlinePlus Magazine Spring 2012	June 02 2012	Listen	Transcript
Common Cold: Is There a Cure?	May 23 2012	Listen	Transcript
Hand Washing Increases Mortality Risk	May 20 2012	Listen	Transcript
Internet Search Includes Early Warning of Drug Interactions	May 11 2012	Listen	Transcript
ADAM: Avoid These Medical Tests	May 09 2012	Listen	Transcript
Lessons from Doctors' Emergency Medical Responses	April 29 2012	Listen	Transcript

Design Good Forms

Make sure users can complete and submit forms. Form elements (text field, checkbox or dropdown list) all have labels, and the label is associated to the correct form element using the <label> tag.

Library/Department Information

Location:

Library/Dept:

Address:

Address 2:

City/Town:

State:

More Considerations

- Repetitive navigation links
 - Need ability to skip or ignore
- Decorative objects (borders)
 - Need coding for screen readers to ignore
- Use of **COLOR** to convey meaning
 - Avoid using color alone; state what it means

PERSON INFORMATION

Name:

Current Address:

City: State: ZIP Code:

Phone: Date of Birth: SSN:

Sex: Ethnic Code: World's passport no.: How long?

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More Best Practices

• Avoid flickering, strobing or flashing images

• Offer ability to skip navigation

• Alert users of timed responses

• Use client-side image maps with alt text




Testing for Accessibility

- Web Tools
 - WAVE
 - FANGS
- Word and PowerPoint
 - Built-in checkers in Microsoft Office software
- PDF files
 - Accessibility tool in Adobe Acrobat Pro
- And many more

WAVE: Web Accessibility Evaluation Tool


Wave Online Tool

- Works in any browser
<http://wave.webaim.org/>



Wave Toolbar

- Firefox add-on
<http://wave.webaim.org/toolbar/>



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WAVE Web Accessibility Evaluation Tool



WAVE Example



Form Labels



Accessible Forms

- When done correctly, you can see these HTML labels for Name and Email fields when you turn on the WAVE tool:



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Wave Toolbar Example



What is the Difference?

Wave Toolbar

- Evaluation works on local machine only
- Evaluates the rendered version, locally displayed styles and dynamically generated content from scripts
- Can check intranet, password protected, dynamically generated, or sensitive pages

Wave at WebAIM

- Request goes through WebAIM server



FANGS Screen Reader Emulator

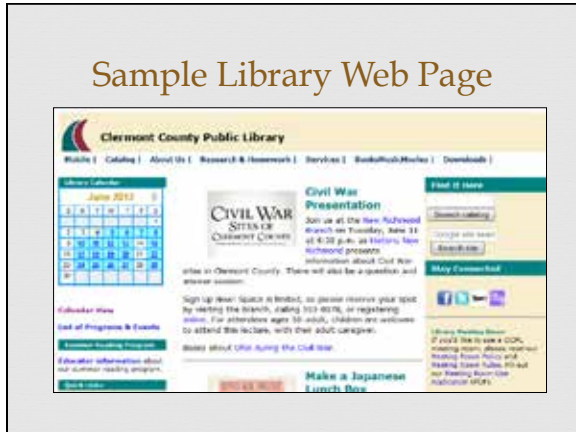


- Firefox add-on
- Provides three options:
 - Text of a webpage just as a screen reader would read it
 - List of headers
 - List of links

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Sample Library Web Page



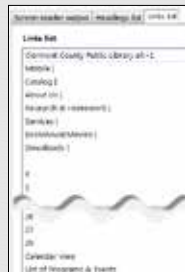
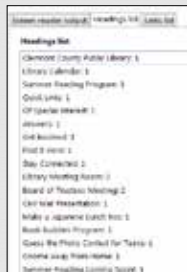
FANGS Output Example



More FANGS View Options

Headings

Links



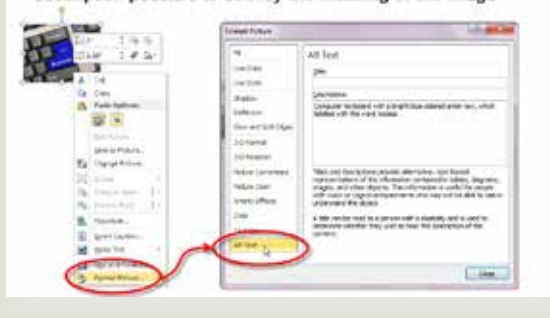
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Tips for Microsoft Word and PowerPoint

- Use built-in formatting structures, such as headers, layouts, and bullets. Screen readers rely on formatting.
- Images need alt text
- Hyperlinks need to be meaningful
- Almost always better to start fresh than to remediate

Right click the image, then Format Picture. Then click Alt Text and type in a short description. Use the shortest description possible to convey the meaning of the image.



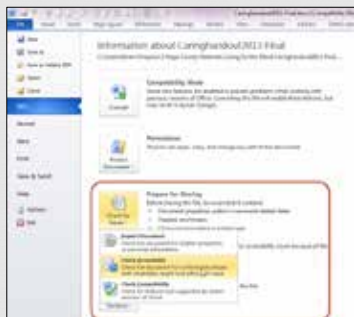
Microsoft Accessibility Checkers

- Office 2007 or later
- Files must be created as .docx or .pptx to use checker
- File menu > Check for Issues > Accessibility
- Inspection Results - points to problems and gives suggestions for fixing

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Microsoft Word



Errors and Warnings



Techniques Unique to PowerPoint

- Start building slides using outline view
- Each slide needs a title (which can be hidden from view if necessary)
- Reading order is important
- Avoid using text boxes – screen readers can't "see" the content. Use the layout and content boxes instead

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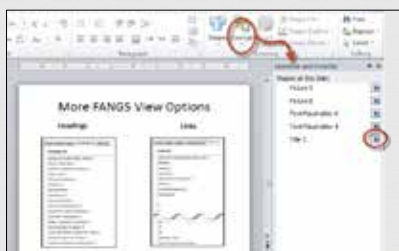
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PowerPoint

- Errors are mostly missing alt text and slide titles
- Warnings - hyperlinks
- Duplicate titles
- Reading order



Reading Order Oddity



508ers New Best Friends

- Shortcuts can be added to Quick Access toolbar:
- ✓ Right click in Quick Access toolbar
 - ✓ Choose Customize Quick Access Toolbar
 - ✓ Under "Choose Commands From" look at dropdown, then choose "Commands Not in the Ribbon"
 - ✓ Add Accessibility Checker, Alt Text and Selection Pane (PowerPoint) for one-click access to these important tools

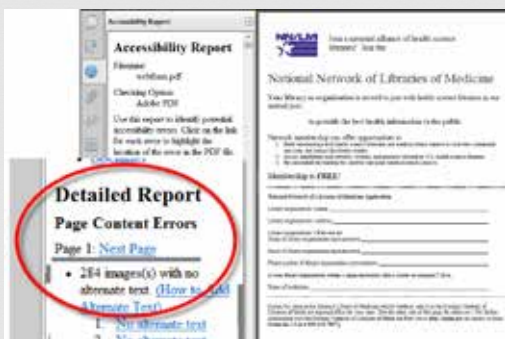
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PDF Files

- Most complicated
- No guarantee that compliant document will retain compliancy when saved as PDF
- Structured docs work best
- Requires Acrobat Pro

PDF Files Can Cause Headaches!



A Drop in the Bucket

Type in the chat box your most pressing training needs:

- Web accessibility?
- Word?
- Powerpoint?
- PDFs?
- Other?



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Form and Function

We can have our cake and eat it too

- Commitment
- Planning, budgeting
- Good design, implementation
- Testing, evaluation

Workarounds?



- Is text equivalent sufficient? NO
 - No one wants to read pages of text.
 - Images and other objects can convey meaning and be more interesting for all users
 - Plan for equivalent experience to extent possible

Summary



- Just because it passes the test...
- Build accessibility techniques into the workflow
- Find solutions, not workarounds
- Improving accessibility improves usability for all users.
- It's the right thing to do

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Thank You!

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Kelli Ham, MLIS
NN/LM Pacific Southwest Region
kkham@library.ucla.edu
<http://nnlm.gov/psr/>
1-800-338-7657



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