Stitch-In: Accessible Document Basics

1. Webinar: May 16, 2025

• Presented by: Marsha Schwanke.

Hosted by: Wisconsin ADA Coordinators Association

2. Disclaimer: Wisconsin ADA Coordinators Association

This Webinar Series is hosted by the Wisconsin ADA Coordinators Association is not meant to be legal advice.

Although we may refer to the Americans with Disabilities Act (ADA) or similar state and local laws, this presentation is provided as an educational resource.

Our goal is to give public entities a framework for accessibility and providing accommodations or modifications. We encourage attendees to seek guidance about their obligations from their own legal counsel.

3. Disclaimer: ADA National Network

The information, materials, and/or technical assistance provided are intended solely as informal guidance and are neither a determination of your legal rights or responsibilities under the Americans with Disabilities Act (ADA), nor binding on any agency with enforcement responsibility under the ADA.

Accessibility cannot be guaranteed for external websites. These links are provided as a courtesy, and are neither intended to, nor do they constitute, an endorsement of the linked materials.

The ADA National Network and its ten regional ADA Centers are funded by a grant from the the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) to provide information, training, and technical assistance on the Americans with Disabilities Act (ADA). For more information and questions on the ADA, contact your regional ADA Center in the ADA National Network via the national website at adata.org or by phone 1-800-949-4232.

4. During Presentation

Thank You for joining today!

Note: Use of the term "Web Access" = Digital Access.

Access Checks and "Knots"

 Enter your answer in the Chat feature within Zoom during the presentation.

Questions

- Enter your question anytime in the Chat within Zoom.
- Presenter will answer at the end of the presentation.

5. This Quilt of Accessible Docs Will Cover

- Basics and Background why, user experience, legal, WCAG
- Patterns to "stitch-in" and check "seamless" access for documents
- Knots barriers to access and missing information that block users
- Resources tools, links, publications and more to grow access

Let's get stitching!

Images: A heart shaped patchwork quilt. The letter S made by thread through a needle above six stitches.

6. World Wide Web – Fabric Our Lives

Image: Collage of people with disabilities using various technologies and in different ways to access the World Wide Web.

7. Why Digital Access?

- Disability, Aging, and Anytime.
 - How many people with disabilities?
 United States: More than 1 in 4 adults with a disabiltiy (28%)
- Save \$ money, time, stress.
- The Law avoid litigation.
- Search Engine Optimization (SEO).
- Flexible to change: person, place, time, content, technology.

Basic human right

United Nations (UN) Convention on the Rights of Persons with Disabilities (CRPD)

Sources: U.S. Census Bureau, World Bank, Centers for Disease Control and Prevention (CDC).

Image: Map of the United States behind the outlines of 4 people. One of the people outlines is in a different color from the other 3 people outlines.

8. Disability Rights, Laws and Digital Access

Image: A patchwork quilt behind a gavel, and three stacked of books (one has the word LAW on the binding). Shelves of books are in the background.

9. ADA and Effective Communication

The ADA requires elimination of communication barriers that prevent equal opportunity to participate and benefit from:

- **Employment** opportunities in both public and private sectors.
- Programs, services, and activities of state and local government.
- Goods, services, or activities offered by public accommodations.

10. What is Effective Communication?

- Communication with people with disabilities must be as EFFECTIVE as communication with others.
- The obligation to communicate effectively applies to the presentation and exchange of information in all forms including sound, print, graphics, voice, and electronic materials such as PDF files, websites.

11. ADA and Digital Access – Bottom Line

U.S. Department of Justice (DOJ)

- Consistently taken the position that the ADA's requirements apply to all the services, programs, or activities, including those offered on the web.
- Non-discrimination and effective communication obligations exist, even in absence of technical standards for digital access in the ADA.
- Keep in mind, the ADA sets the minimum standards.

12. Web Content Accessibility Guidelines (WCAG)

- Four "P O U R" principles (Perceivable, Operable, Understandable, Robust)

 - Success criteria (over 50) with 3 conformance levels (A, AA, AAA)
 - Level A minimum
 - > Level AA meet Level A and recognized standard
 - > Level AAA meet Level A, AA and most accessible
 - ▼ Techniques sufficient, advisory, failures
- Developed by: World Wide Web Consortium (W3C) Web Accessibility Initiative (WAI) Web: w3.org/WAI

13. ADA Title II Rule for Web Content and Mobile Apps

> Rule as of April 2024

- Applies to ADA Title II public entities.
- Specific requirements to make sure that web content and mobile apps are accessible to people with disabilities.
- Sets Technical Standard to meet:
 Web Content Accessibility Guidelines (WCAG) Version 2.1, Level AA
- Learn More
 - Fact Sheet: ADA Title II Rule on Accessibility of Web and Mobile Apps
 - First Steps to Complying with ADA Title II Rule

Source: U.S. Department of Justice (DOJ)

Web: ada.gov

14. What is covered in the ADA Title II Rule?

- All electronic resources and digital tools used in programs, services, and activities must be accessible including:
 - Websites, Software and Apps
 - Multimedia (videos, podcasts, audio-recordings)
 - Conventional electronic documents
 (word processing, spreadsheet, PDF, and presentation files)
 - Social media
 - Course content
 - Library and e-learning course content

15. When is compliance for ADA Title II Rule?

NOTE: Date of compliance depends on population size of public entity.

A table with 2 columns and 4 rows shows the size of the state or local government and compliance date.

- 50,000 or more persons: Compliance date: April 24, 2026
- **0 to 49,999 persons:** Compliance date: April 26, 2027
- Special district governments: Compliance date: April 26, 2027

16. Where to Start for Accessible Docs?

Image: A patchwork quilt behind a variety of quilting and sewing tools.

17. Plan for Access Success – The Time Is Now!

- Accessibility policies: how and when (start, continual, periodic).
 - Part of your ADA Transition Plan
- **Procurement** vendors, products.
- Way to make accessibility requests and report issues.
 - Accessibility "link" and statement
- > Training: Everyone has role not just the "techie."
- Check and fix access issues:
 - Identify and start with most critical and most used content.
 - Perform access checks manually and with testing tools.
 - User Testing.

18. Universal Design (UD)

Definition

The design of products and environments so can be accessed, understood, and used, to the greatest extent possible, by all people regardless of their age, size, ability, or disability.

Principles (7)

- Equitable
- Flexibility in Use
- Simple and Intuitive Use
- Perceptible Information
- Tolerance for Error
- Low Physical Effort
- Size and Space for Use

19. Voluntary Product Accessibility Template (VPAT)

- Tool used to document a product's conformance with the Section 508 accessibility standards and guidelines.
- Accessibility Conformance Report (ACR)

20. Stitch-In: Document Access

Six patterns to stich-in for seamless document access.

(File ID, Structure, Writing, Color, Images, Links).

A patchwork quilt with six patterns for accessible design.

Each pattern is on a white square with the name above an icon, .

1. File ID.

Icon: circled question mark. .

2. Structure.

Icon: four bulleted straight lines in a square.

3. Writing.

Icon: outline of sharpened pencil.

4. Color.

Icon: rainbow with a cloud at each end.

5. Images.

Icon: outline of sun and mountains on top of two overlapping rectangles.

6. Links.

Icon: square with arrow pointing out from the center to the top right corner.

21. File ID: Title and Source Properties

> Title:

- First viewed and read.
- Used in search and bookmarks.
- Required: WCAG 2.4.2 -Page Titled
- > Slide Titles: need to be unique.
- Document Title (general):
 - Word: Under File menu, select Information
 - Mac: Under File menu, select Properties.

22. File ID: Title and Source Properties - PDF

- Under File menu, select Properties.
 - **Description tab**: Enter Title, Author, etc.
 - Initial View tab: Under Window Options, select Document Title.
 - Advanced tab: Under Reading Options, select Language.

23. Structure: Required for Access

- Structure is required under WCAG.
- Used to organize and find information.
- Assistive technology cannot recognize the meaning and cannot navigate if you only format for "looks" with bolding, italics, or various font sizes.

Image: How a document appears visually styled with headings and paragraphs layout compared to how a document appears using a screen reader as a single long block of text with no formatting.

24. Screen Reader and Text to Speech (TTS)

- > Technology "reads" text and gives navigation cues into speech, Braille, or both.
- Control by keyboard, tactile, or voice.
 - Mobile navigation by touch or swipe.
- May be used with screen magnification.
- > Examples:
 - JAWS
 - NVDA (only Windows)
 - VoiceOver (Mac)
 - Narrator (Windows)
 - Talkback (Android)

25. Refreshable Braille Display

- Works by raising and lowering combinations of pins in Braille cells.
- Shows up to 80 characters at a time and continually changes.
- Works with keyboard and screen reader.
- Used mostly by people who are deaf and blind.

26. How Screen Readers Get Information

- Headings navigate by (72%) and find useful (89%)
- Use the Find feature (search)
- Read through page
- List of Links
- > Text descriptions

Screen Reader User Survey #10 by WebAIM (2024)

Web: webaim.org/projects/screenreadersurvey10/

27. Structure: Styles, Tools, Templates

> Styles Pane

Example: Styles Pane in Microsoft Word.

Built-In Styles and Tools

Example: Icons for Lists (numbered, bulleted) in toolbar of Microsoft Word.

- Templates
- Slide Master
- Style Sheet (cascading style sheet CSS)

28. Structure: Headings

Use headings in order and to structure the content like an outline.

- Heading 1 (title, most important) to Heading 6.
- Screen readers navigate by headings.
 - Says how many headings on a page.
 - Reads as: heading level (number) then the text.
- Avoid skipping heading levels.
- WCAG Required.

29. Structure: Lists

- Types of Lists: numbered and bulleted.
- Use the built-in tools to create the list. .
 - Assistive technology cannot recognize the meaning and cannot navigate if you only format to look like a list with tabbed spacing, typed numbers or dashes for bullets.
- Screen readers can navigate structured lists.
 - Says type of list and number of items in the list.

30. Structure: Font and Formatting

Font: use sans-serif (or non-serif)

*Sans-serif: Arial, Verdana

· Serif: Times New Roman

> Size Minimums

Body text: 12 point (16 pixel)

Footer: 9 pt (12 px)

Large print: 18 pt (24 px)

Limit: ALL CAPS "shouting", italics and scripts

➤ Line-Spacing: 1.15 to 2

31. Example: Font and Formatting

Difficult to Read

THE <u>ADA NATIONAL NETWORK</u> PROVIDES INFORMATION, GUIDANCE, AND TRAINING ON THE AMERICANS WITH DISABILITIES ACT (ADA). THE INFORMATION AND/OR MATERIALS PROVIDED ARE INTENDED SOLELY AS INFORMAL GUIDANCE AND SHOULD NOT BE CONSTRUED AS LEGAL ADVICE.

Easier to Read

The **ADA National Network** provides information, guidance, and training the Americans with Disabilities Act (ADA). The information and/or materials provided are intended solely as informal guidance and should not be construed as legal advice.

32. Structure: PowerPoint Slide Order

Reading Order Pane

CHECK: Top to Bottom reading order

Selection Pane

CHECK: Bottom to top reading order

33. Structure: Tables

- Use only to show information and not formatting.
- Identify column and/or row headers.
- Color contrast of rows and headers.
- Caption, summarize, and/or have text equivalent for tables.

Example: Table with 3 columns and 4 rows. The first row is the header row for the 3 columns: Craft Project, How Many Made, and Cost. The other 3 rows have information on three different craft projects, how many made, and its cost.

34. Structure: PDF Access Tips

- Start with accessible source.
- Save often! Changes made cannot be undone,
- Tags: check order and structure (vital for screen reader).
- Reading order: check Order Panel
 - o Image: Icon for Order Panel looks like the letter Z over four boxes.
- Reflow view: single-column layout based on content order.
- Table Inspector
- Accessibility Checker:
 - Two manual checks color contrast, reading order
- Action Wizard if scanned or untagged PDF.

35. Writing: Plain Language

- Material is in plain language if the audience can:
 - Find what they need.
 - Understand the first time what they find.
 - Use what they find to meet their needs.
- Examples of changed words
 - · utilize to use
 - "Means of egress" to "exit routes."
 - assistance to aid or help
 - "in the event of" to if

Source: PlainLanguage.gov

36. Writing: Plain Language Tips

- Keep it short and standard (K.I.S.S.)
- Use dashes in phone numbers.
- > Spell out first use of acronyms and abbreviations.
- Have clear layout with headings, lists, paragraphs.
- Use active voice who does what (in that order).
 - Active: The dog chased the ball.
 - Passive : The ball was chased by the dog
- Written at 6th to 8th grade reading level.

37. Writing: Easy Read

- > One sentence per line and one idea per sentence.
- Shows information in two ways with pictures and words.
- Written at 3rd to 5th grade reading level.

Source: Autistic Self-Advocacy Network (ASAN)

38. Writing: Check Spelling and Readability (1 of 2)

- Microsoft Word and Flesch-Kincaid
- Hemingway Editor
 - Versions: Free and paid
- ChatGPT
 - Free account
 - With correct commands, can convert your text into plain language or Easy Read.
 - Do not enter sensitive or personal information.
 - Review always.

39. Writing: Check Spelling and Readability (2 of 2)

Example: Microsoft Word and Flesch-Kincaid

- 1. In the ribbon, go to the Editor
- 2. The Editor box opens to show four sections of information:
 - Editor Score (percentage)
 - Corrections
 - Refinements
 - Insights.

To view the Readability Statistics, select the area under Insights that says: Document stats.

- **3.** The Readability Statistics are shown un three sections of information:
 - Counts for Words, Characters, Paragraphs, Sentences
 - Averages for Sentences per Paragraph, Words per Sentence, Characters per Word
 - Readability Flesch Reading Ease, Flesch-Kincaid Grade Level, Passive Sentences

40. Color: Variations and Meaning

- Check color is **NOT the only way** to understand the information.
- Color variations and absence of color due to disability, lighting, and technology.
- What Do You See?

List of my food allergies in red but the four items listed are only seen in black color. There is no red color seen to identify if I am allergic to bananas, gluten, nuts, tomatoes.

41. Color: Contrast and Alternatives

- Line styles
- Shapes
- Fill colors, patterns, texture
- Labels

Images:

- A donut pie chart with five sections with labels and in different colors.
- A bar graph for three data points. Each data point has three bars with contrasing fill colors and textures: 1. Solid red; 2. Green with diagonal lines; 3. Solid white.

42. Contrast Example

Text of the Example (lines are numbered for reference).

- 1) A little hard to see.
- 2) Feeling blue?
- 3) Have some summer fun!

Option 1

Description of each line.

- 1) Green text on white background color.
- 2) Black text with textured blue background color.
- 3) Black text with water of swimming pool as background. The text description of the image is: A wheelchair pulled up to the edge of a swimming pool; the person using the wheelchair splashes a foot in the water.

Option 2 – Better.

Description of each line.

- 1) Bolded blue text on white background color.
- 2) Black text with light green background color.
- 3) White text on blue color block with water of swimming pool as background. The text description of the image is: A wheelchair pulled up to the edge of a swimming pool; the person using the wheelchair splashes a foot in the water.

43. Contrast - More Than How It Looks

Images

- Line graph of three lines with squares and in different colors.
- Bar graph with three bars in different colors.

44. Color: Contrast Ratio

- Normal Text contrast should be 4.5:1 or more
 - Text Size SMALLER than
 - 18 point OR bolded 14 point
 - 16 pixels OR bolded 18 pixels
- > Large Text contrast should be 3:1 or more
 - Text Size LARGER than
 - 18 point OR bolded 14 point
 - 16 pixels OR bolded 18 pixels

45. Color: What and How to Check

What to Check

- Color of text, links, images (foreground) to background color
- Adjacent colors (like in a pie chart)
- Multi-color images (like logos)

➢ How To Check

- Print or view in grayscale.
- Color blindness simulator.
- Color contrast checker.
- Accessible color palettes. .1 results.

46. Color Check: Print or View in Grayscale

Images

- Original image: U.S. map with ten regions of U.S. in different colors.
- Greyscale view 1: U.S. map with ten regions of U.S. in different shades of gray.
- Greyscale view 2: U.S. map with ten regions of U.S. in different shades of gray. There is space between each region and the region number is circled. The spacing between each region and having the region number in a white color on a dark circle with outlined edge provides increased contrast and easier id of the different regions.

47. Check: Color Blindness

- Original image: U.S. map showing states covered by each of the 11 U.S. Circuit Courts
- Image viewed with Blue/Yellow Color Blindness
- Image viewed with Red/Green Color Blindness

48. Color: Check: Contrast Tool

> Example:

Colour Contrast Analyzer (CCA)

Web: tpgi.com/color-contrast-checker/

 Screenshot of Colour Contrast Analyzer Tool showing Foreground and Background colours (HEX #, RGB numbers and sliders to adjust for red/green/blue/alpha), Sample preview and WCAG 2.1 results.

49. Images: Text Equivalent

Alternative-text (alt-text) is required.

- Short, equivalent content and function in context.
- Read by screen readers or displayed if image unavailable due to disability, technology, environment
- ➤ Helps search engine optimization (SEO).
- Screenshot: Header image for Federal Concepts Module with arrow pointed to "alt-text" of this image Federal Court Concept

50. Images: Adding Alternative Text

> Add or Edit:

- 1. Right-click on image
- 2. Select Edit Alt Text

Check the box:

Mark as decorative (or "archive")

Caution in use:

Generate a description for me.

51. Images: Automatic and Artificial Intelligence (AI)

- Example: Red arrow pointing right to a button to "Generate a description for me" from Microsoft Office when set Alt Text for Images, Objects, and Non-Text Elements.
- > Example:
 - The Alt-Text automatically generated for an image is:
 A picture containing text, receipt. Description automatically generated.
 [Actual image: A card to RSVP for an event.]

52. Images: Writing Alt-Text

- ➤ Limit: 125 characters.
- > Think about Three C's.
 - Convey
 - Concise
 - Context
- Use proper punctuation.

Image: Decision Tree for Image Purpose.

- Decorative or Informative?
- If decorative: Two options (plus one not listed):
 - O Use alt = "";
 - Use CSS.
 - Not listed: check the box to mark as decorative (or set to "archive").
- If informative: Five options:
 - o Picture: Use a name or a short description.
 - o Text: Repeat text word-for-word.
 - o Complex Data: Provide an overview.
 - Symbol: Identify essence or purpose.
 - Functional Image: Emphasize action or link purpose.

Source: W3C Images Tutorial and alt Decision Tree

53. Display of Infographics and Data

Images

- 1. A map of the United States showing people living with a disability and people with no disability.
- 2. Infographic about the number of people living with a disability and how common are specific disabilities.

54. Knot: Images

Make a text equivalent for a complex graphic.

Image: The word Persuasion in a black triangle over three columns in different colors. The columns have headings of: Logos, Ethos, and Pathos. Under the heading of each column are 2-3 blocks with a subheadings and information points.

55. Review Knot: Images

Persuasion

- > Logos
 - 1 Content
- > Ethos
 - 2 Content
 - 4 Delivery
- Pathos
 - 3 Content
 - 5 Delivery

Image: The word Persuasion in a black triangle over three columns in different colors. The columns have headings of: Logos, Ethos, and Pathos. Under the heading of each column are 2-3 blocks with a subheadings and information points (that could be structured as lists).

56. Links

- ➤ Be descriptive of the destination and underlined
- Avoid web address as the link or provide shortened format (if can).
- Inform if opening a new window.

- Identify the file type in the link, if goes to non-web file.
- ➤ List the web address (URL) for print and in presentations.

Example:

Prize Claim [PDF file]

Web: register/prize-claim.pdf

- > Social Media: put links near end of post.
- ➤ Hashtags: use camel case #ADANetwork

57. Knot: Links

You are a winner!

To claim your prize:

- + Click here now
- + <u>Download</u> From: <u>www.register-pdf.com</u>
- + Email

Learn more.

#dreamvacation

Image: QR code.

58. Review Knot: Links

You are a winner!

To claim your prize:

■ Now: Get your prize!

Download Form: Prize Claim [PDF file]

Web: register-pdf.com

Email: ClaimMyPrize@resort.com

Learn more about your prize in this video.

#DreamVacation

Image: Scan this code to view the video about your prize.

59. Access Success: More Than Tools
Accessibility Tool Evaluation
100% Passed = 100% Accessible
Congratulations! No errors were detected
60. Passing the Access Test
☐ Check to accessibility standards.
 Include from start and as continual process.
☐ Tools good start but can't do EVERYTHING.
☐ Keep in mind: Access snapshot vs. "one and done."
Avoid "quick-fix" overlays.
 Often conflicts and duplicates assistive technology.
 Doesn't really address access at its core.
☐ Always need:
human judgment
manual review.
the actual user experience
61. Manual Quick Checks
 □ Check file properties (title, author, language). □ "Run a tab" keyboard only (no mouse). □ Zoom in (+) / out (-) view to 200%. □ View on different devices and screen sizes.

62. Navigate: Test with Screen Reader

- Check order and features to access.
 - ☐ Headings, Links, Images, Form Fields, Menus
- > Examples of screen reader
 - Stand-alone: JAWS, NVDA (only Windows)
 - "Built in": VoiceOver (Mac), Narrator (Windows)
 - Mobile: Talkback (Android), VoiceOver (Apple iOS)
- Resources
 - ☐ Using NVDA to Evaluate Web Accessibility

Web: webaim.org

Getting Started Testing with NVDA

Web: accessibility.huit.harvard.edu

63. REVIEW: Stitch-In Digital Access

Six patterns to stich-in seamless document access.

- 1. **File ID:** document title, author, and language.
- 2. **Structure**: headings in order, built-in tools for styes and lists, table headers and only for data.
- 3. Color: contrast and use not only to convey meaning.
- 4. Images: alternate text equivalent or marked "decorative."
- 5. Links: meaningful stand-alone link text.
- 6. Writing and Accessibility Checks:

start, continual, and before share use built-in and standalone tools..

64. Knot: Testing Access

Which of the following is not true? When testing for accessibility, you always need:

- A. human judgement
- B. manual review
- C. user feedback
- D. only validation tools

65. Stitch In Digital Access

Web Accessibility = Equal Opportunity.

An accessible website provides equal opportunity for everyone to:
Get Information, Learn, Work, and Communicate.

66. Resources

- ASK questions.
- LEARN more.
- STAY connected.

67. Resources

• Digital Access Basics: Explore. Learn. Share.

Source: Southeast ADA Center

Web: adasoutheast.org/digital-access-basic-checks-testing/

Global Accessibility Awareness Day (GAAD)

Web: Accessibility.Day

Accessible Technology Webinar Series

Source: Great Lakes and Southeast ADA Centers Web: accessibilityonline.org/ada-tech/archives/

68. Resources: ADA National Network

• ADA National Network: Digital Access - Search Results

Find: Research Briefs, Fact Sheets, Training Events, Archives, and more.

Web: adata.org

Office of Civil Rights (OCR)

Video Series: Digital Access in Education

Web: adata.org/ocr-videos

• ADA Title II Action Guide for State and Local Government

Web: adaactionguide.org

69. Great Lakes ADA Center

Toll-Free: 800-949-4232

Phone: 312-413-1407

SMS: 872-298-1019

Web: ADAGreatLakes.org

Connect & Follow

LinkedIn @great-lakes-ada-center

Facebook @ADAGreatLakes

70. ADA National Network:

Information, Guidance, and Training on the Americans with Disabilities Act

Phone: 800-949-4232

Web: ADAta.org

Connect & Follow

- LinkedIn @ada-national-network
- Facebook @ADANetwork
- Bluesky @adata.org

Disclaimer:

The information, materials, and/or technical assistance provided are intended solely as informal guidance and are neither a determination of your legal rights or responsibilities under the Americans with Disabilities Act (ADA), nor binding on any agency with enforcement responsibility under the ADA.

Accessibility cannot be guaranteed for external websites. These links are provided as a courtesy, and are neither intended to, nor do they constitute, an endorsement of the linked materials.

The ADA National Network and its ten regional ADA Centers are funded by a grant from the the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) to provide information, training, and technical assistance on the Americans with Disabilities Act