

Digital Access: Break I.T. Down

4th Thursday ADA Talks – September 2023

1. Digital Access: Break I.T. Down

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IMAGES

- Starting point dot with curvy line going to access open heart-shaped lock.
- People with disabilities, represented by four icons in a cube.
 - Top left: blind/visual disability: person using a white cane.
 - Top right: mobility disability: outline of person in wheelchair.
 - Bottom left: d/Deaf: outline of two hands signing.
 - Bottom right: Hard of hearing: ear with small sound waves entering and larger sound waves exiting.

2. Disclaimer

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3. Why? Digital Access from the Start

Disability, Aging, & Anytime

- Continuum of disability.
- Temporarily able-bodied (TAB).
- Disability “hidden” over Web.
- Tech, environment, and content not static.

Benefits

- Essential for some, useful for all.
- Save \$\$, time, stress vs. retrofit.
- The Law - avoid litigation.
- Easier to manage, more compatible and flexible.

IMAGE: Seven icons for disabilities: blind, visual, physical, learning/dyslexia, cognitive, d/Deaf, hard of hearing.

Left to Right:

1. Icon for blind: outline of person walking with white cane.
2. Icon for visual disability: outline of partially covered eye.
3. Icon for physical disability: outline of person pushing a wheelchair.
4. Icon for learning/dyslexia: question mark over outline of book.
5. Icon for cognitive disability: outline of head with brain.
6. Icon for d/Deaf: outline of two hands signing.
7. Icon for hard of hearing: ear with small sound waves entering and larger sound waves exiting.

4. Why? Power of Digital Access

- **Basic human right.**
United Nations (UN) Convention on the Rights of Persons with Disabilities (CRPD)
- Disability Impacts ALL of Us - Communities, Health, Access.

IMAGE: World circled by four people holding hands.

5. Why? Community

- Figure: Nobody's going to help.
- Woman: We're part of a community and communities help each other.

IMAGE: Frame 53 from 100 Demon Dialogues by Lucy Bellwood. The character who is sitting facing away from the woman and the group of people says: "Nobody's Going To Help." There is a group of people behind a woman who is kneeling on the right of the character. The woman says: "We're part of a community and communities help each other."

Source: [100 Demon Dialogues by Lucy Bellwood](#).

Web: lucybellwood.com/books/100-demon-dialogues/

6. Why? Search Engine Optimization (SEO)

- "Google is, for all intents, a billionaire blind user with tens of millions of friends, all of whom hang on his every word."
- Karsten M. Self (2002)
- Overlap and inclusive of diversity, usability, universal design.
 - Meaningful and unique page titles.
 - Headings.
 - Lists.
 - Descriptive links.
 - Text equivalents for images and non-text content.
 - Transcripts and captions.
 - Readability.

IMAGE: Handheld magnifying glass.

7. Landscape - Language

- Digital vs. Web accessibility.
- Define terms so on “same page.”
 - #a11y = accessibility
 - AI = artificial intelligence
 - AT = Assistive Technology
 - CMS = Content Management System
 - LMS = Learning Management System
 - UD = universal design

8. Landscape - WCAG: Web Content Accessibility Guidelines

- Four “**P O U R**” principles
(**P**erceivable, **O**perable, **U**nderstandable, **R**obust)
- Guidelines
- Success criteria - Three **compliance levels** (A, AA, AAA)
- Techniques

[W3C Web Accessibility Initiative \(WAI\)](https://www.w3.org/WAI)

Web: [w3.org/WAI](https://www.w3.org/WAI)

9. Landscape – Legal: Americans with Disabilities Act

- Is there an ADA compliance obligation for web access?
- **1990:** No technical standards as ADA passed before Internet widespread.
- No way to eval “ADA-compliant”.
- **But ADA is about:**
 - non-discrimination
 - effective communication
 - equal access and equal opportunity
- [Guidance for Web Accessibility and ADA](https://www.ada.gov/resources/web-guidance) (March 2022)
Web: [ada.gov/resources/web-guidance](https://www.ada.gov/resources/web-guidance)

IMAGES (2)

- Celebrate. Learn, Share. ADA 33 (1990-2023). Americans with Disabilities Act.
- U.S. Department of Justice (DOJ).

10. Landscape – Legal: Cases and “Surf-By” Lawsuits

- Varying outcomes across state and federal courts.
 - **Nexus** between physical location and website.
 - **WCAG** often used or referenced as the standard.
- Some states and courts: “serial filings”, “standing to sue.”

Resources

- [Research Briefs: Digital Access: ADA Title III, Higher Education](#)
Web: adata.org
- [Court Decisions Briefs](#)
Web: adasoutheast.org
- [Webinar Series: ADA Legal, Section 508](#)
Web: accessibilityonline.org
- [ADA Title III News & Highlights](#)
Web: adatitleiii.com
- [Accessibility Legal Updates](#)
Web: lflegal.com

11. Comment and Share on Web Access

Notice of Proposed Rulemaking (NPRM)

- **U.S. Department of Justice (DOJ)**

***Comments Deadline:** 10/3/2023

REVIEW: ADA.gov

[Fact Sheet: DOJ NPRM Web Access of State & Local Government](#)

GO TO: FederalRegister.gov

[DOJ Nondiscrimination, Disability, Web Access, State & Local Gov.](#)

- **U.S. Department of Health and Human Services (HHS)**

***Comments Deadline:** 11/13/2023

REVIEW: [HHS Section 504 NPRM](#)

[Subpart I: Web, Mobile, and Kiosk Accessibility \(§§ 80.82–80.88\)](#)

GO TO: FederalRegister.gov

[HHS NPRM: Discrimination on Basis of Disability](#)

12. Landscape – People and the Web

IMAGES

- Curvy road leading to jumbled letters flowing from a stack of open books to a computer screen.
- Seven icons for various disabilities: Blind, Visual, Physical, Learning/Dyslexia, Cognitive, Deaf, Hard of Hearing.
 - Icon for Blind: figure walking with white cane.
 - Icon for visual: outline of partially covered eye
 - Icon for physical: figure pushing wheelchair.
 - Icon for learning/dyslexia: question mark over book.
 - Icon for cognitive: outline of head with brain.
 - Icon for Deaf: outline of two hands using sign language.
 - Icon for hard-of hearing: ear with small sound waves entering and larger sound waves exiting.

13. What is the User Experience?

Paragraph of four sentences with all words having mixed-up, out of order letters, except the first and last letter of each word are in the right place.

The text of the paragraph says: According to a researcher at Cambridge University, it doesn't matter in what order the letters in a word are, the only important thing is that the first and last letters be

at the right place. The rest can be a total mess and you can still read it without problem. This is because the human mind does not read every letter by itself, but the word as a whole. Amazing huh!

The paragraph with the mixed-up letters in each word: Aoccdrnig to a rscheearchr at Cmabrigde Uinervtisy, it deosn't mttar in waht oredr the ltters in a wrod are, the olny iprmoetnt tihng is taht the frist and lsat lttres be at the rghit pclae. The rset can be a tatol mses and you can sitll raed it wouthit porbeslm. Tihs is bcuseae the huamn mnid deos not raed ervey lteter by istlef, but the wrod as a wlohe. Amzanig huh!

14. Through My Eyes (slide 1 of 2)

IMAGE: Webpage viewed by one form of 20/200 vision, which is the definition of "legally blind". None of the words are visible and the structure of the webpage no longer appears obvious.

15. Through My Eyes (slide 2 of 2)

Simulations:

- Normal vision: Two boys sitting next to each other. Each boy is holding a ball (left: yellow with red swirls; right: soccer ball - white with red pentagons).
- Macular Degeneration: The whole picture is blurry, and the faces of the boys are blocked out.
- Diabetic Neuropathy: The whole picture is blurry with various areas blocked out. [Largest single cause of visual impairment among those of working class.]
- Tunnel Vision: Like looking through a straw. Except for a small circle, the whole picture is totally blocked out. [Often makes it possible to read small print but not large print.]
- Glaucoma: Except for a small area, the picture is gradually grayed and blocked out.
- Myopia: The picture is overall fuzzy, blurry.

Source: National Eye Institute

Web: nei.nih.gov

16. What is a screen reader?

- Translates text, code (markup), functions
 - Text-to-speech (TTS)
 - Refreshable Braille display
- Control by keyboard, tactile or voice.
- Examples of screen reader
 - Stand-alone: JAWS, NVDA (only Windows)
 - "Built in": VoiceOver (Mac), Narrator (Windows)
 - Mobile: Talkback (Android), VoiceOver (Apple iOS)

IMAGES (2)

- Left: Video Clip from "Blind Life with Christine Hà,: How the Blind email, tweet, and blog. Christine was the first blind MasterChef contestant and 2012 winner.
- Right: Refreshable Braille Display.

17. Examples: Auxiliary Aids and Services for People Who Are Blind or Visually Impaired

- Qualified readers
- Audio recordings
- Braille materials and displays
- Screen reader software
- Magnification software
- Large print materials
- Accessible electronic and information technology

IMAGE: Curvy road.

18. Examples: Auxiliary Aids and Services for People Who Are Deaf or Hard of Hearing

- Qualified interpreters (on-site or via video remote interpreting (VRI) services).
- Exchange of written notes.
- Real-time computer-aided transcription services (CART).

- Assistive listening devices and/or systems.
- Open and closed captioning (CC).
- Accessible electronic and information technology.

IMAGE: Curvy road.

19. Video: Web Accessibility Perspectives

- [Video: 10 Web Accessibility Perspectives \(7:36 min.\)](#)
Web: youtube.com/watch?v=3f31oufqFSM
- [W3C WAI Web Accessibility Perspectives Videos](#)
Web: w3.org/WAI/perspective-videos/

IMAGE: Six photos collage of people with disabilities using the Web with various tools and in various environments.

20. Checkpoints (8)

Road to digital access with eight checkpoints:

- File ID
- Writing
- Structure
- Color
- Images
- Links
- Media
- Navigate

IMAGES: Eight checkpoints on yellow diamond-shaped signs.

Top row (left to right)

1. File ID with icon: circled question mark.
2. Writing with icon: outline of sharpened pencil.
3. Structure with icon: four bulleted straight lines in a square.
4. Color with icon: rainbow with a cloud at each end.

Bottom (left to right)

5. Images with icon: outline of sun and mountains on top of two overlapping rectangles.
6. Links with icon: square with arrow pointing out from the center to the top right corner.
7. Media with icon: rectangular comment bubble with six straight lines.
8. Navigate with icon: four arrows pointing out to top, right, bottom, left.

21. File ID: Source and Properties

- From the start, accessibility depends on the program and structure in creating the file.
- **Add/Edit File Properties**
 - **Title:** descriptive and must be completed for accessibility.
 - **Author:** auto-populates with username from which file created; review for accuracy.
 - **Language**

IMAGE: Road leading to yellow diamond-shaped sign with the words: File ID and an Icon: circled question mark.

22. Writing: Plain Language

- Use clear, concise, well-organized writing.
- Check readability (built-in, free tools)
- Keep it simple and standard – K.I.S.S. Principle

Resources

- [Plain Language Guidelines](http://plainlanguage.gov)
plainlanguage.gov
- [Archive: Plain Language: Accessibility for Content](http://digital.gov)
digital.gov
- [Easy Read Resources Guide](http://autisticadvocacy.org/resources/accessibility/easyread/)
Web: autisticadvocacy.org/resources/accessibility/easyread/

IMAGE: Road leading to yellow diamond-shaped sign with the words: Writing and an Icon: outline of sharpened pencil.

23. Writing: Font

- **Limit:** ALL CAPS “shouting”, *italics* and scripts
- **Size**
 - **Body text:** minimum 12 pt (16 px)
 - **Footer:** minimum 9 pt (12 px)
 - **PowerPoint:** minimum 24 pt (32 px)
 - **Large print:** 18 pt (24 px) or larger
- **Font:** serif vs. sans-serif

IMAGE: The letter F in two different fonts. Left: The letter F in serif font with the serifs of the letter circled in red. Right: Letter F in sans-serif font. Credit: Serif vs. Sans for Text in Print | Fonts.com

24. Road Block 1A: Wall of Text

Excerpt of text with no formatting or structure: What is the Americans with Disabilities Act (ADA)? The ADA became law in 1990. The ADA is a civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public. The ADA is divided into five titles (or sections). Title I (Employment) Equal Employment Opportunity for Individuals with Disabilities. This portion of the law is regulated and enforced by the U.S. Equal Employment Opportunity Commission. Title II (State and Local Government). Nondiscrimination on the Basis of Disability in State and Local Government Services. This title outlines the administrative processes to be followed, including requirements for self-evaluation and planning; requirements for making reasonable modifications to policies, practices, and procedures where necessary to avoid discrimination; architectural barriers to be identified; and the need for effective communication. This title is regulated and enforced by the U.S. Department of Justice...

Source: ADA National Network – What is the ADA?

Web: <https://adata.org/learn-about-ada>

25. Structure: Headings (slide 1 of 2)

Use to organize and navigate content.

IMAGES (4)

- How a document appears visually styled with headings and paragraphs layout compared to how a documents appears using a screen reader as a single long block of text with no formatting.
- Outline of Heading 1 (largest) to Heading 5 (smaller). Each heading level is smaller sized font and below the previous heading level.
- A conceptual line showing a document with a start and an end with numerous types of markers on the line showing how AT jumps to and from headings, images, and tables.
- Yellow diamond-shaped sign with the word: Structure and an Icon: four bulleted straight lines in a square.

26. Structure: Headings (slide 2 of 2)

- **Required use**
 - [WCAG Web Accessibility Tutorials > Page Structure > Headings](http://www.w3.org/WAI/tutorials/page-structure/headings/)
- **Tips in Writing**
 - Users often read only first 3-4 words of headline.
 - Lines: 60-100 characters.
 - Sentence: <= 20 words.
 - Paragraph: <= 5 sentences.
- **Plain Text Document** - format so structure can be determined.
 - Double blank lines before titles, headings.
 - *Asterisks to indicate list items.
 - Other standard formatting conventions.

IMAGES: Road leading to yellow diamond-shaped sign with the word: Structure and an Icon: four bulleted straight lines in a square.

27. Road Block1B: Hearing vs. Seeing.

IMAGE: Example for visual eye tracking of a webpage. There are red dots connected by lines to different sections and information. The pattern of dots and lines is like letter the Z, going from left to right, top to bottom.

28. Structure: Styles Pane, Tools, Templates

- Headings/Content.
Example: Styles Pane in Microsoft Word with six different styles (Clear Formatting, Heading 1, Heading 2, Heading 3, Normal, List).
- Lists.
Example: Icons for Lists (numbered, bulleted) circled in toolbar of Microsoft Word.
- Templates and Slide Master
- Style Sheet (cascading style sheet – CSS)

29. Structure: Email Tips

- **Subject lines:** make descriptive.
- **Font:** minimum font size (14px), sans serif fonts
- **Spacing:** 1.15 to 2 and left-justify
- **Check:** Zoom-in to 200%
- Use built-in functions and tools.
 - Example: Screenshot: Toolbar in Microsoft Outlook.

30. Structure: PDF Tips

- **Start:** accessible source file.
- **Tags pane:** check reading order and structure.
- **Save often!** Changes made cannot be undone.
- **Reflow view:** single-column layout based on content order.
- **Table Inspector**
- **Images (decorative)**
 - Use background / artifact in Reading Order tool vs. setting under alternate text.
- **Accessibility Checker:** built-in feature.

Make Accessible Action Wizard: if scanned or untagged PDF

31. Navigate: PowerPoint Slide Order

Reading Order Pane

- Toolbar: Review > Check Accessibility > Reading Order Pane
- **REVIEW: Top to Bottom** reading order

Selection Pane

- Toolbar: Arrange > Selection Pane.
- **REVIEW: Bottom to Top** reading order

IMAGES

Reading Order Pane

- A red box around the Reading Order Pane tools in the dropdown menu of Check Accessibility in PowerPoint.
- Reading Order Pane in PowerPoint with red arrow pointing down (top to bottom) to show reading order of the numbered elements in the slide.

Selection Pane

- A red box around the Selection Pane tools in the dropdown menu of Arrange in PowerPoint.
- Selection Pane in PowerPoint with red arrow pointing up (bottom to top) to show reading order of elements in the slide.

32. Road Block 1C: Table without Structure

Where do I go for Biology 205?

Table with 10 columns and 7 rows. Department Code, Class Number, Section, Max Enrollment, Current Enrollment, Room Number, Days, Start Time, End Time, Instructor, BIO, 100, 1, 15, 13, 5, Mon., Wed., Fri., 10:00, 11:00, Magde, 100, 2, 15, 7, 5, Tue., Thu., 11:00, 12:30, Indge, 205, 1, 15, 9, 6, Tue., Thu., 09:00, 10:30, Magde, 315, 1, 12, 3, 6, Mon., Wed., Fri., 13:00, 14:00, Indge, BUS, 150, 1, 15, 15, ...

Source: WebAIM Tables

Web: <https://webaim.org/techniques/tables/>

33. Structure: Tables

➤ Best Practices

- Only use for data, not for layout.
- Avoid split or merged table cells.

➤ Design: color contrast, line styles, spacing

➤ Description: summary, caption, alt-text

➤ Identify: header row(s), colspan and rowspan

Example: Family Birthdays

Table with 3 columns and 3 rows. The name, age, and birthday for Fred Flintstone and Pebbles. Fred Flintstone, 55, 5/5/55. Pebbles, 2, 2/21/2021. The table header row has a dark blue background with bold white text. The table data rows have black text on alternate background colors of light blue and gray. The first table data cell in each row has bolded text and is marked as a table header.

34. Road Block 2L Images without alternative text

Order your free food. kwajex.gif

[INLINE] [INLINE] [INLINE] [LINK] [INLINE] [INLINE] [INLINE]

IMAGE

- The filename of kwajex.gif displays for an image with no alt-text.
- All images with no alt-text display only as repeated lines of [INLINE] [INLINE] [INLINE] [LINK] [INLINE] [INLINE] [INLINE]

35. Images: Alternative-text (alt-text) is required.

- Read by screen readers.
- Displays if image unavailable due to disability, technology, environment, or situation.

IMAGE: Screenshot of header image for Federal Concepts Module with arrow pointed to "alt-text" of this image - Federal Court Concept

36. Images: If "Decorative" (no information)

Don't describe

- If spacer, background, or bullet image.
- If image repeats surrounding text.
- If image would be same as link text.

Mark as decorative, set to be "null"

- Example: Red arrow pointing right to a checkbox "mark as decorative" from Microsoft Office when set Alt Text for Images, Objects, and Non-Text Elements.

37. Images: Testing and Writing Alt-Text

- Think about Three C's Convey, Concise, Context
- Use proper punctuation.
- Check with tool and user review.

Source: W3C WAI Images Tutorial and alt Decision Tree

IMAGE: Decision Tree:

- Image Purpose. Decorative or Informative?
- If decorative: Two options:
 - Use alt = ""
 - Use CSS
- If informative: Five options:
 - Picture: Use a name or a short description.
 - Text: Repeat text word-for-word.
 - Complex Data: Provide an overview.
 - Symbol: Identify essence or purpose.
 - Functional Image: Emphasize action or link purpose.

38. Images: Avoid AI / automatic

- 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.
- Examples:
 - Alt Text that was AI-generated for an image = "A person wearing a suit and tie"
Description automatically generated
[Actual image: The man in the image is not wearing a tie nor a suit. Man is wearing a blue jacket over blue-striped white shirt and gray pants.]
 - Alt Text that was AI-generated for an image = "A close up of text on a white surface"
Description automatically generated
[Actual image: Job Descriptions - white label on a brown file folder.]
 - Alt Text that was AI-generated for an image = Logo
Description automatically generated
[Actual image: ADA 32 (1990-2022) Americans with Disabilities Act - Celebrate the ADA! July 26, 2022]

39. Road Block 3: Color Contrast

My food allergies are highlighted in red.

- Nuts, Gluten, Tomatoes, Bananas, Peppers

IMAGE: Text is white on green background. No red is displayed as cannot be seen due to color blindness.

40. Color: Testing

- Check **color alone not required to understand** content.
 - Bad: Information in **green** is required.
 - Good: ***Required fields**
- **WCAG 2.1 AA:** 3:1 large text and 4.5:1 normal text
 - Normal text: 12 pt /16 px or bold, 9 pt /12 px
 - Large Text: > 18 pt / 24px or bold, 14 pt /18 px

IMAGES (2)

- Icon for bad (red X).
- Icon for good: green checkmark

41. Color: Testing Tools

- Check for text, links, images.
 - View in grayscale
 - Color contrast checker
 - Color blindness simulator
 - Accessible color palettes
 - Built-in tools
- 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.

42. Color: Alternatives

- Line Styles
- Fill Colors (Contrast)
- Fill Pattern
- Fill Texture
- Labels
- Shapes
- Alt-text / Actual Text

43. Color: Example: Bar Graph with Fill Textures

IMAGES (2)

1. LEFT: Bar graph of three series of three categories. Each category has a different fill color (red, green with diagonal lines, white). The fill texture of diagonal lines for green category provides contrast to the adjacent red category.
2. RIGHT: Grayscale view of Bar graph of three series of three categories. Each category has a different fill color (dark gray, gray with diagonal lines, white). The fill texture of diagonal lines for the middle category provides contrast to the adjacent dark gray and white categories.

44. Color: Example: Map

IMAGES (3)

1. Left: Map of United States with different colors for ten regions and U.S. territories of Virgin Islands, Puerto Rico, and Pacific Basin.
2. Top Right: Greyscale view of United States map with different shades of gray for ten regions and U.S. territories of Virgin Islands, Puerto Rico, and Pacific Basin.
3. Bottom Right: Greyscale view of U.S. map with circled region number and space between the ten regions and U.S. territories of Virgin Islands, Puerto Rico, and Pacific Basin. The spacing between each region and having the region number in white color on a dark circle provides increased contrast to easier id the different regions.

45. Road Block 4: Links that are not descriptive

Note: The links in this example are not active links.

You are a winner!

- **Click here**
- To learn **more**
- **And here**
- **Download**
- Form: **www.register-pdf.com**

46. Links

- #1 interaction - visually scanned and in content underlined
- Is link **distinct & informative on its own?**
- Avoid web address as the link.
- Are users informed if opening new window?
- Broken? Run link checkers to identify and fix.
- Is the file type in the link if goes to non-web files?

[Registration Form \[PDF\]](#)

IMAGES (2)

- Icon for PDF file visually displayed and located before the link to “Registration Form [PDF]”
- Road leading to yellow diamond-shaped sign with the word: Links and an Icon: square with arrow pointing out from the center to the top right corner.

47. Road Block 5: Media with no alternative.

Video with no sound or captions and only American Sign Language.

IMAGE: Screenshot from FEMA video: Person wearing a dark blue collared shirt with words FEMA and the FEMA logo. In the background is the United States flag and the logo for FEMA on a blue background.

NOTE: For presentation: sound and captions of video are turned off.

Video Source: Federal Emergency Management Association (FEMA).

Web: <https://www.youtube.com/watch?v=Dx7gPoCTdaE>

48. Media: Captioning (CC)

- **Captions:** synchronized, equivalent, available
 - Captioning box: contrast and position not overlap.
- **Transcript:** text alternative to audio.
 - Identify speakers and include sounds.
 - Most tools have option to export plain text transcript.
 - Format to make more useful (lists, paragraph, headings).
- **Interactive transcripts:** text highlighted when spoken
 - If select text in transcript, then go to that point in media.
 - Feature of media player uses captions file.
- **Video player**

IMAGE: Video player with accessible controls. Able Player is accessible cross browser video player that supports audio and video.

- + Play = one triangle pointing to right
- + Replay = half circular pointing arrow
- + Go Back = two triangles pointing left
- + Fast Forward = two triangles pointing right
- + Slow speed = turtle icon
- + Fast speed = rabbit icon
- + Captioning = two letters, CC
- + Audio description = letter D with three curved sound wave lines
- + Transcript = square with 3 straight lines

IMAGE: Road leading to yellow diamond-shaped sign with word Media and an icon: rectangular comment bubble with six straight lines.

49. Media: Audio Description

- Example: [Pip \[Audio Description\]](#)
[YouTube, 4:04 min..]
youtube.com/watch?v=KqANNQDgkAc

Resources

- [Video: Audio Description in a Couple Minutes](#)
Source: YouTube Channel - Rooted in Rights
- [Best Online Video Players for Audio Description](#)
Note: Limited support.
- [How to Add Audio Description \(W3C Approved Technique\)](#)
Source: 3playmedia.com

IMAGE: Screenshot from video - Pip: Animation of white dog with blue eyes facing forward and standing on a sidewalk. In the background, there is a blue sky, two trees, and construction signs on a road.

50. Media: Example: Transcript with Visuals Description

Two column table with text transcript of audio and visual descriptions for the [Video: Web Accessibility Perspectives: Video Captions](#).

- Web Accessibility Perspectives: Video Captions.
Visual: Web Accessibility Perspectives: Video Captions.
- Video isn't just about pictures, it's also about sound. Without the audio, you would have to guess what this film is about.
Visual: A man sat at a desk starts watching a video on his computer.
- [no sound] Visual: The video on his computer shows a person speaking to the camera. It is playing with no audio.
- Frustrating, isn't it? Not knowing what's going on. That's the situation for everyone who can't hear.
Visual: The man watching the video has a hearing aid.
- Captions make videos accessible.
Visual: He turns on captions for the video playing.

Web: w3.org/WAI/perspective-videos/captions/#transcript

51. Media: More Captioning

- **Real-time or Live Captioning**
 - Communication Access Realtime Translation (CART)
- **Social media captions**
 - About 85% of people watch videos ON MUTE.
- **Video conferencing captioning**
 - Within platform or external in web browser (StreamText)
- **Auto-generated intelligence (AI)**
 - Review and edit so don't have "craptions."

52. Road Block 6: Social Media not accessible

Facebook Post:

Looking for Work? #greatestcompanyever

<http://www.greatestcompanyever.org>

We are Hiring! Contact us. Apply here.

A picture containing person, indoor. QR code.

53. Social Media

- **Message:** Be brief and consistent across platforms.
+ **Think:** what you post may disclose disability.
- **Images:** alt-text
- **Links:** put near end of post; shorten web address
- **Hashtags:** put after link; use CamelCase #ADANetwork

Tool Kit:

[Improving Accessibility of Social Media in Government](#)

Web: digital.gov/resources/

IMAGE: Collage of social media icons.

54. Road Block 8: Accessibility Testing

Accessibility Tool Evaluation

100% Passed = **100%** Accessible

Congratulations! No errors were detected.

55. User Testing: More Than Rules and Tools (slide 1 of 2)

Always need human review.

- "It takes only five users to uncover 80 percent of high-level usability problems." Source: Jakob Nielsen (2005)
- "Most every site I go to fails my 3-second accessibility test - increasing size of type." Source: Steve Krug (2005)

IMAGE: Curvy road leading to a group of people around a table.

56. User Testing: More Than Rules and Tools (slide 1 of 2)

Actual user experience

Research showed "testing with users who have disabilities may uncover 45% more accessibility problems than testing with software alone." Source: Disability Rights Commission (2004)

57. Passing the Access Test

- Check to accessibility standards (WCAG, Section 508).
 - Include from start and as continual process.
- Tools good start but **can't do EVERYTHING.**
- Access snapshot vs. "one and done."
- Avoid "quick-fix" overlays.
 - Often conflicts and duplicative of assistive technology.
 - Doesn't really address access at its core.

IMAGE: Curvy road leading to sign for "passing the test" - a red circle with green checkmark in gray checkbox.

58. Passing the Access Test: Manual Quick Checks

- Everyone has role - not just the "techie."
- Do **manual 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.

59. Navigate: Test with Screen Reader

- Check order and features to access.
 - Headings
 - Links
 - Form Fields
 - Menus
- Resources
 - [Using NVDA to Evaluate Web Accessibility](#)
Web: webaim.org
 - [Getting Started Testing with NVDA](#)
Web: accessibility.huit.harvard.edu

60. Navigate: Test forms and CAPTCHA

- Used for security:
Completely Automated Public Test to tell Computers and Humans Apart – remains most problematic
- Types: image, word, audio, logic ?s, challenge
- Examples of CAPTCHA
 - reCAPTCHA
 - Audio Verification
 - Image with distorted letters
 - Word Verification (text)

IMAGES (3)

- Left: Screen shot of simple CAPTCHA with a single checkbox.
- Right: Screen shot of visual captcha.
- Bottom: Screen shot of window with interface for audio CAPTCHA.

61. Roadmap to Digital Access Is...

"... is in its universality. Access by everyone, regardless of disability, technology, or environment is an essential, integral aspect of life."

Source: Tim Berners-Lee, W3C Director, Inventor of Web

IMAGES (4)

- Hand in hand with usability and inclusion.
 - Shown by two hands interlocking above the text: Usability & Inclusion.
- Everyone – not just the “techie – Each person can help and is a connection in communication.
 - Shown by 6 circles with different color outlines of people connected by black lines.
- “ Not a one-time checkbox - Include from the start & as continual process.
 - Shown by green checkmark in a box covered by circle with diagonal line which indicates "no."
- Think outside the box.
 - Shown by the word THINK in bold upper-case letters above a solid color box.

62. Heart of Digital Access

First and foremost is real people.

Access to: Get information. Learn. Work. Communicate.

IMAGES (5)

- Center: Red heart above the graphic: Get Information. Learn. Work. Communicate.
- Top Left: Learn: Three students gathered around a computer screen, two of the students are wearing headphones with mics.
- Bottom Left: Get Information: Older man and older woman smiling and looking at each other.
- Top Right: Communicate: A man using sign language.
- Bottom Right: Work: A man wearing a suit walking through a library while holding the harness of a service animal.

70. Questions and Contact

Southeast ADA Center

Burton Blatt Institute – Syracuse University

Phone: 404-541-9001 or 711 (relay)

E-mail: adasoutheast@syr.edu

Web: adasoutheast.org

Connect and Follow

- [**Instagram** @southeastada](#)
- [**LinkedIn** @southeast-ada-center](#)
- [**Facebook** @southeastadacenter](#)
- [**Twitter** @southeastada](#)

More Resources for Digital Access and Testing

Resources: ADA National Network

- [Guidance on Web Accessibility and the ADA](#)
Web: ada.gov/resources/web-guidance/
- [ADA National Network](#)
Web: adata.org
 - Digital Access and ADA Title III
 - Digital Access for Students in Higher Education and ADA
- [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
- [Digital Access – Think. Explore. Learn. Share.](#)
Web: adasoutheast.org

Navigate: Quick Access Review

1. What is title or name (site, page, file)?
2. What are the major sections (headings)?
3. What are my options at this level (menu, links)?
4. Where am I in the scheme of things (page, breadcrumb)?
5. How can I search?
6. Is there easily to find contact information?
7. How to report access problems or request accessible services and information?

Resources: Passing the Access Test

- Built-in Tools” to program or system to check accessibility”
- [W3C Web Accessibility Test & Evaluate](#)
Web: 3.org/WAI/test-evaluate
- [Easy Checks - First Review of Web Accessibility](#)
Web: w3.org/wai/test-evaluate/preliminary
- [Quick Reference: Testing Web Content for Accessibility](#)
Web: webaim.org/resources/evalquickref

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