

ACCESSIBLE TECHNOLOGY WEBINAR SERIES





Web Accessibility 101

Session Begins 1:00 pm CST
Periodic Audio Testing Occurring

1

- Full list - *Keyboard Shortcuts* from the *Help* menu on the Menu Bar.
- Chat: Move cursor to the Message text box
 Windows: Ctrl+M
 Mac: Command-M
- Speaker level Up:
 Windows: Ctrl+Alt+Up Arrow
 Mac: Command-Option-Up Arrow
- Speaker level Down:
 Windows: Ctrl+Alt+Down Arrow
 Mac: Command-Option-Down Arrow

2

- Open Closed-Captioning window
 Windows: Ctrl+F8
 Mac: Command-F8
- Close Closed-Captioning window
 Windows: Alt+F4 or Ctrl+W
 Mac: Command-W

3

Listening to the Webinar

- The audio for today's webinar is being broadcast through your computer. Please make sure your speakers are turned on or your headphones are plugged in.
- You can control the audio broadcast via the Audio & Video panel. You can adjust the sound by "sliding" the sound bar left or right.
- If you are having sound quality problems check your audio controls by going through the Audio Wizard which is accessed by selecting the microphone icon on the Audio & Video panel.



4

Listening to the Webinar, *continued*

If you do not have sound capabilities on your computer or prefer to listen by phone, dial:

1-712-432-3066

Pass Code:
148937

This is **not** a Toll Free number

5

Listening to the Webinar, *continued*

MOBILE Devices supported include iPhone, iPad, Android Devices, Kindle Fire HD)**

Individuals can download the free Blackboard Collaborate App from the Apple Store, Google Play or Amazon



**Closed Captioning is not visible via the Mobile App and there is limited access to the white board for individual's using voice over technology

6

Captioning

- Real-time captioning is provided during this webinar.
- The caption screen can be accessed by choosing the  icon in the Audio & Video panel.



- Once selected you will have the option to resize the captioning window, change the font size and save the transcript.

7

- You may type and submit questions in the Chat Area Text Box or press Control-M and enter text in the Chat Area

- If you are connected via a mobile device you may submit questions in the chat area within the App
- If you are listening by phone and not logged in to the webinar, you may ask questions by emailing them to webinars@ada-audio.org

Please note: This webinar is being recorded and can be accessed on the website at www.ada-audio.org within 24 hours after the conclusion of the session.



8

Customize Your View

- Resize the Whiteboard where the Presentation slides are shown to make it smaller or larger by choosing from the drop down menu located above and to the left of the whiteboard. The default is "fit page"
- Resize/Reposition the Chat, Participant and Audio & Video panels by "detaching" and using your mouse to reposition or "stretch/shrink". Each panel may be detached using the  icon in the upper right corner of each panel.

9

Setting Preferences

- Depending on your system settings you may receive visual and audible notifications when individuals enter/leave the webinar room or when other actions are taken by participants. This can be distracting.
- To turn off notifications (audible/visual)
 - Select "Edit" from the tool bar at the top of your screen
 - From the drop down menu select "Preferences"
 - Scroll down to "General"
 - select "Audible Notifications" Uncheck anything you don't want to receive and "apply"
 - Select "Visual Notifications" Uncheck anything you don't want to receive and "apply"
 - For Screen Reader User – Set preferences through the setting options within the Activity Window (Ctrl+slash opens the activity window)

10

Technical Assistance

- If you experience any technical difficulties during the webinar:
 1. Submit a message regarding your issue via the chat area and the Moderator will address your concern via a private chat with you and/or refer it to one of the Great Lakes ADA Center IT Staff to contact you off line; or
 2. Email webinars@ada-audio.org; or
 3. Call 877-232-1990 (V/TTY)

11

Accessibility 101

An ingredient in the recipe, not an addition for afterwards
 September 21, 2017

12

What isn't Disability?

- Disability is not a single phenomenon, and does not have a single definition.
- Different individuals experience disability in different ways that are informed by myriad personal, social, and cultural factors.



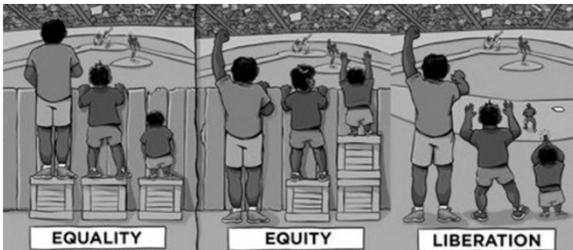
13

What is disability (in the AT world)?

- Visual disabilities (e.g., blindness, low vision, color blindness)
- Auditory disabilities (e.g., deafness, hard of hearing)
- Motor disabilities (e.g., paralysis, cerebral palsy, missing/damaged limbs)
- Cognitive disabilities (e.g., learning disabilities, traumatic brain injury, dyslexia)
- Seizure disabilities (e.g., epilepsy)
- Age-related impairments (e.g., diminished sensory acuity, dexterity, stamina)

14

Accommodation vs. Accessibility



15

Accommodation

- Some aspect of a system—for example a document or facility—has been adapted or modified to meet the needs of a specific individual or group.
- This frame shows the tallest person standing on the ground, the medium-height person standing on one riser, and the shortest person standing on two stacked risers. All three people can now see the game. An accommodation, or a “temporary fix” has been made so all can see the game.



16

Accessibility

- *Accessibility* signifies the degree to which products and systems can be used by the greatest number of people, including people with disabilities, and doesn't require adaptation or modification to remove barriers to access or operation.
- This frame shows all three people standing on the ground watching the game. In this frame, the fence has been removed and there are no risers. This is accessibility, no one has a barrier.



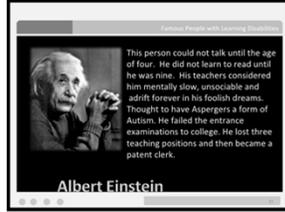
17

Examples?

- Can you think of some accommodation examples for someone with a:
 - Visual disabilities (e.g., blindness, low vision, color blindness)
 - Auditory disabilities (e.g., deafness, hard of hearing)
 - Motor disabilities (e.g., paralysis, cerebral palsy, missing/damaged limbs)
 - Cognitive disabilities (e.g., learning disabilities, traumatic brain injury, dyslexia)

18

Disabilities are not Stereotypes



19

Accessibility Challenges

Welcome to the age of computers

20

21st Century = the Technology World

- Nearly any activity you can name has some degree of technology associated with it.
- Barriers prevent participation when technology is designed and deployed without accessibility in mind.
- A piece of technology is only as accessible as its least accessible component.
- Unless technology is created with accessibility in mind, users with disabilities will continue to experience such barriers.

21

Accessibility Principles: POUR

- Accessible technology is *Perceivable, Operable, Understandable, and Robust.*
- Many of the technology challenges faced by people with disabilities can be described using one of the POUR principles.



22

POUR

- **Perceivability** means the user can identify content and interface elements by means of the senses.
- **Operability** means that a user can successfully use controls, buttons, navigation, and other necessary interactive elements.
- **Understandable** technology is consistent.
- **Robust** I.T. is standards-compliant, and designed to function on all appropriate technologies.

23

Perceivability

- An online application form contains numerous input fields.
- An online training video narrates a process for completing a task.
- An online article is presented as a scanned PDF.
- A website's contact information is displayed in the footer and the contrast is insufficient to distinguish between background and text.



24

Operable

- Navigation menu reveals a submenu of links when a user hovers over it with a mouse.
- A website's social media links can be activated with a click of the mouse.
- An online form permits a user to make multiple selections from a drop-down menu.



25

Understandable

- A website's navigation consists of a number of links that are displayed in a different order from page to page.
- A PDF registration form contains required email and phone number fields.
- A Word document contains a number of non-English words and phrases.
- A technical website makes use of numerous abbreviations, acronyms, and jargon.



26

Robust

- A website requires a specific version of a web browser to make use of its features.
- A document format is inaccessible to a screen reader on a particular operating system.
- An online training video requires an inaccessible plug-in to play in the web browser.
- A web application fails to include features for alternative inputs, such as keyboard or voice commands



27

And then come AT

Assistive Technology to the Rescue!

28

What is Assistive Technology

- Assistive technology (AT) is technology that helps people with disabilities to accomplish tasks by improving or enhancing a user's capabilities.
- There are different kinds of assistive technology:
 - Screen readers
 - magnification software
 - speech recognition software
 - touch screens
 - Braille displays, and other alternative input and display options
- Assistive technology by itself cannot make an inaccessible system accessible.

29

Screen Readers

Text to Speech devices

- JAWS: created and distributed through Freedom Scientific
- NVDA: A free, open-source tool made available through the non-profit NVAccess
- VoiceOver: integrated into MacOS and iOS
- [Screen Reader Demo Video](#)

Totally Free Screen Reader [D2L](#)



- NVDA (NonVisual Desktop Access) is a free "screen reader" which enables blind and vision impaired people to use computers.
- Normally screen readers are expensive, making them unaffordable for many blind people. NVDA has been downloaded 70,000+ times, in 43 languages.
- www.nvaccess.org

30

Screen Magnification/Contrast

Viewing Size, Color Scheme.
Screen magnifiers can be software or hardware-based, may magnify all or part of a screen, and may be integrated or add-on tools.

- MAGic
- Zoom Text



31

Speech Recognition

Speech recognition products let users with limited dexterity or mobility operate technology by issuing voice commands and dictation.

- Dragon Naturally Speaking
- Windows Speech Recognition
- iOS Speech Recognition/Siri



32

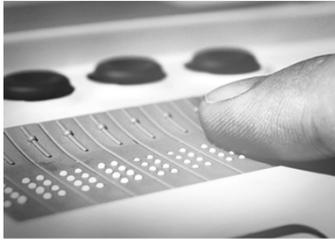
Alternative Computer Input

- Alternative keyboard designs
- Joy sticks
- "Sip and puff" devices controlled by the mouth
- A device controlled by eye movements



33

Questions about AT?



34

Your Role

Everyone has a place in accessibility

35

It's the Law

- Section 504 of the Rehabilitation Act of 1973
 - prohibits discrimination on the basis of disability in federal programs and services, including colleges and universities that use federal funds (e.g., student financial aid).
- The Americans with Disabilities Act of 1990
 - Title II of the ADA requires that communications to people with disabilities be equally as effective as communications with non-disabled people in their timeliness, accuracy, and delivery method.
 - Title III of the ADA prohibits discrimination on the basis of disability in places of accommodation, the definition of which includes businesses, places of entertainment, the offices of service providers, and some private educational institutions.

36

It Benefits Everybody

- ESL
- Multiple learning styles
- Consistent output of information



37

Everyone has a Part

• Digital accessibility is a collaborative effort and one that won't happen overnight. Find the people on your campus who will be good partners on your journey and work with them on various aspects of accessibility. Some partners to consider:

- Disability services office
- Center for teaching and learning
- Web developer groups
- Accessibility or diversity-related communities of practice
- Instructional designers and academic technologists
- Librarians
- People with disabilities

38

QUESTIONS

You May Type and Submit questions in the Chat Area Text Box or press Control-M and enter text in the Chat Area

Web Accessibility 101

39

Thank You For Your Attention!

Christy Blew, M.S., C.C.T
IT Accessibility Specialist
University of Illinois
clblew@Illinois.edu



40



The session today was recorded
and will be archived at
www.ada-accessibletech.org

NEXT SESSION IS PDF Accessibility: Regulations, Risks, and Strategies
November 16, 2017

Accessible Technology Webinar Series is Sponsored by the Great Lakes ADA Center and the Pacific ADA Center, members of the ADA National Network.

41
