



“How to Design and Deliver an Accessible Webinar”

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

- The Session begins at 1:00 pm CST
- We will be testing audio quality periodically

Audio and Visual are provided through the on-line webinar system. This session is closed captioned. Individuals may also listen via telephone by dialing 1-712-432-3066 code 148937 (This is **not** a Toll Free number)

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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



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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



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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



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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.



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Submitting Questions

- 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



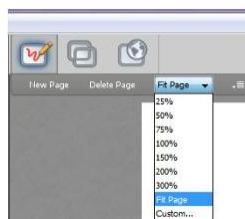
Please note: This webinar is being recorded and can be accessed on the website at www.ada-audio.org within 24 hours after the conclusion of the session.




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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”



Customize Your View *continued*

- 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.

Technical Assistance



- If you experience any technical difficulties during the webinar:
 1. Send a private chat message to the host by double clicking “Great Lakes ADA” in the participant list. A tab titled “Great Lakes ADA” will appear in the chat panel. Type your comment in the text box and “enter” (Keyboard - F6, Arrow up or down to locate “Great Lakes ADA” and select to send a message); or
 2. Email webinars@ada-audio.org; or
 3. Call 877-232-1990 (V/TTY)



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How to Design and Deliver an Accessible Webinar

Robin Jones, Director
Great Lakes ADA Center
University of Illinois at Chicago



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Agenda

- Webinar versus Webcast
- Understanding the barriers/needs of user groups with disabilities
- Accessibility Features
- Participant/Moderator Considerations
- Presentation Materials/Content Considerations
- Recording/Archiving



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Webinar vs Webcast

- “Webinar” - a live seminar or other presentation that takes place on the Internet that involves the ability to give, receive and discuss information.
- “Webcast” – the transmission of data that is one way and does not typically have interaction between the presenter and the audience



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Why Use Webinar Technology?

- **Webinar tools are affordable.** Users can participate in a webinar session with a computer, mobile device or other video/audio capture devices, and broadband network connection from any location.
- **Webinar tools enable synchronous communication.** An instructor can communicate with the audience in a synchronous format and provide immediate feedback to the learner/participant.
- **Webinar tools facilitate interaction.** Instructors can lecture, interact with the audience and facilitate collaboration in a real-time format
- **Webinar tools provide an environment in which content can be archived.** Whether it be for reviewing the content or for people who missed the real-time session.



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Who is Using Webinar Technology?

- Higher Education Institutions
 - Course instruction
- Corporations
 - Facilitate meetings, staff training, etc.
- Sales and Marketing Firms
 - Promoting goods and services to customers
- Governmental Entities
 - Staff training, community outreach, etc.
- Consultants and “Experts”
 - Training and technical assistance



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Legal Implications for use of “accessible” webinar technology

- **Federal Government** – Section 508 of the Rehabilitation Act (Access to electronic and information technology procured by Federal agencies) and Section 504 of the Rehabilitation Act
- **Local and State Government entities** – Title II of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act (Employment and Access to Programs and Services and Auxiliary Aids and Services)
- **Places of Public Accommodation*** – Title III of the Americans with Disabilities Act (Access to Goods and Services and Effective Communication)
- **Private employers of 15 or more employees*** – Title I of the Americans with Disabilities Act (Reasonable Accommodation)

*Recipients of federal financial assistance would be subject to Section 504 of the Rehabilitation Act



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Understanding Barriers for People with Disabilities

- **Auditory**– Difficulty hearing sounds or a range of decibels. Often referred to as either Deaf or Hard of Hearing.
- **Visual**– Difficulty seeing images, light or color. Different degrees of loss occur which are referred to as either Blind, Low Vision or Color Blind.
- **Limited fine or gross motor skills** – Difficulty manipulating small objects with hands or moving limbs.
- **Cognitive**– Difficulty processing information delivered aurally, visually or both including memory loss. This includes individuals with clinical diagnosis of learning disability, autism, traumatic brain injury, attention deficit disorder (ADD), Down Syndrome, etc.



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Implications for Webinar Technology

- **Auditory**

- Content delivered aurally should also be available through integrated streaming text/captioning window
 - Ability to enlarge font
 - Ability to resize and relocate the captioning window
 - Ability to save the captions
- Availability of text messaging
- Video should be open captioned
- Does not rely solely on sounds to alert participants to key events in a session (hand raising, etc.)
- Recording captures the captioning so that it is displayed during playback



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Implications for Webinar Technology

- **Visual**

- Controls should be able to be accessed and enabled using keyboard commands
- Controls should be labeled so that they can be read by a screen reader
- Tab order should be sequential
- All content should be scalable so that it is not distorted when magnified with assistive technology
- Audible notifications of key events in a session (i.e. hand raised, incoming chat message, etc.)
- User defined color/contrast themes
- All session content should be readable by a screen reader, including the text content of a PowerPoint slide (including alt text of images, charts, graphs and tables)



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Implications for Webinar Technology

- **Limited fine/gross motor movements**
 - Full keyboard navigation through all interfaces of the system, including secondary windows
 - Keyboard navigation through major modules (i.e. whiteboard, chat area, audio controls, etc.)
 - Short cut or accelerator keys to navigate key interactions (i.e. Hand raising, polling, etc.)



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Implications for Webinar Technology

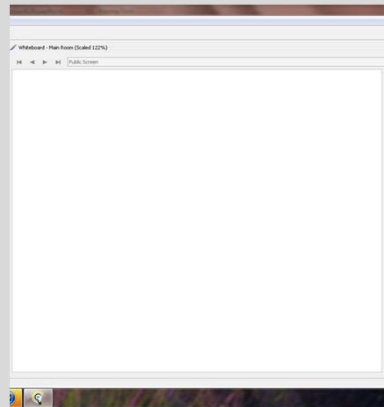
- **Cognitive**
 - Ability to respond verbally with microphone/phone or by typing in chat window
 - Ability to save whiteboard material for further review outside of a session
 - Ability to use captioning window and auditory input simultaneously
 - Ability to record content for review at a later time
 - Ability to control the speed of content delivery



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“Typical” Webinar Platform Components

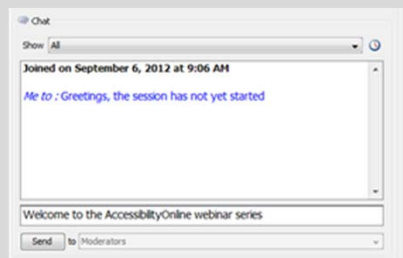
Whiteboard – viewing area for visual content (presentation, documents, multi-media, etc.)



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“Typical” Webinar Platform Components (2)

- Chat Area – interactivity window for written questions, comments, etc.



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“Typical” Webinar Platform Components (3)

Participant List – identifies “who” and “how many” people are participating and records responses to interactive features and may be used by participants for the purpose of sending messages



Permissions/Available Features – identifies permissions or features available to participants (i.e. microphone, chat area, video, etc.)



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“Typical” Webinar Platform Components (4)

Microphone controls – turn on/off the microphone



Sound controls – adjust speaker volume



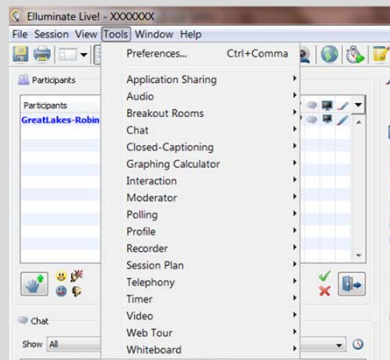
Video Controls



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“Typical” Webinar Platform Components (5)

Menu Options - customizing view, setting preferences, turning captioning on/off, saving files, etc.



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“Typical” Webinar Platform Components (6)

- Interactive controls – raising hand, responding to quizzes, emotions, etc.



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“Typical” Webinar Platform Components (7)

- VoIP Telephony connection option – integrated telephone bridge option to transmit/receive audio
- Ensure the prompt dial box has accessible text



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“Typical” Webinar Platform Components (8)

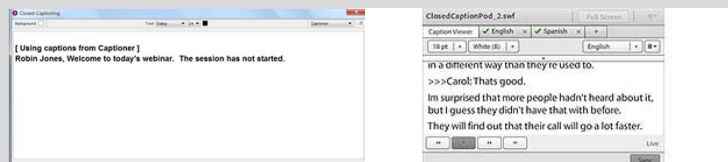
- Mobile Technology/Connectivity
 - Many platforms offer mobile device options to connect to the platform
 - Limited accessibility via the mobile app
 - Little to no White Board access for individuals using voice over technology on their mobile device (Android, Apple, Kindle Fire HD, etc.)
 - Captioning not supported via the mobile app
 - Issues associated with quality of connection based on Wi-Fi or cellular connection speeds



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Captioning Module/Pane

- Systems may or may not offer an integrated captioning pane or module



- Integrated captioning is essential to an accessible event.



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Considerations for webinar platforms

In addition to the “accessibility” of the webinar components consider the following issues which may impact usability:

- Compatibility with a variety of browsers – Safari, Chrome, Internet Explorer, Firefox, Opera, etc.
- Compatibility with different operating systems – Windows or MAC OS
- Availability of support for moderators and users either through web based support, customer service line, etc.
- Published information regarding the accessibility features of the platform and availability of knowledgeable technical support via website, customer service line, etc.



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Participant/User Considerations

- **Age of Computer Technology** – older personal computers may not be compatible with new technologies utilized in webinar platforms
- **Internet Speed** – the speed of the internet connection will have a direct impact on the quality of sound and video at the users end
 - Wireless connection is NOT recommended
- **Firewalls** – organizational/personal system firewalls may block access to a webinar platform



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Participant/User Considerations (2)

- **Quality of speakers/availability of a sound card on the computer** – may opt to use a headset/ear phones connected via USB or headset jack
- **Availability of a telephone option to receive audio** – the provider may/may not provide this option
- **Availability of technical support in advance of a scheduled session to test technology** – contact provider and/or seek information on the entities website



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Participant/User Considerations (3)

- **Software Updates** - ensure that all software updates are installed and they are compatible with the one utilized by the platform (i.e. Windows Updates, JAVA, Media Player Versions, etc.)
 - Check platform documentation to verify software requirements



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Moderator Side Considerations

- **Determine whether or not presenters and/or participants will utilize headsets/microphones to transmit audio** – sound quality can be impacted by user equipment.
- **Conduct “practice sessions” with presenters** –
 - address sound quality issues in advance of scheduled sessions
 - address utilization of assistive technology by the presenter and recognize that additional instruction may be needed such as keyboard navigation commands, orientation to presenter interface, etc.



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Moderator Side Considerations (2)

- **Instruct presenters regarding accessibility and special considerations needed to ensure the content of their presentation is accessible**
 - Describe all images relevant to the content of the slide
 - State the slide number that they are on
 - Be aware that “running” through the slides when referring to a previous slide negatively impacts screen reader users
 - Slow the pace of the presentation in order to ensure that the captioner is able to keep pace with the presenter
 - Allow for additional time for submitting questions to ensure that those using assistive technology or with cognitive limitations have time to submit questions in the chat area before moving on



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Moderator Side Considerations (3)

- **Provide instructions to participants regarding key webinar features that will be utilized during the session in advance**
 - Repeat instructions when features are used during the session (i.e. how to use chat area, polling, etc.)
- **Monitor the status of closed captioning during the session**
 - The session should be paused if any technical problems occur with the captioning during the session.
 - Resume the session ONLY after captioning is functioning properly.



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Preparing Materials

Handouts –

- Copies of presentation materials, resources, etc. should be available in accessible format
 - Electronic Text Document
- Materials should be available in advance (may be done on request only basis)
- Images, charts, tables, graphs within documents should have alt text to describe the image within the handout



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Preparing Materials (2)

Presentation Materials -

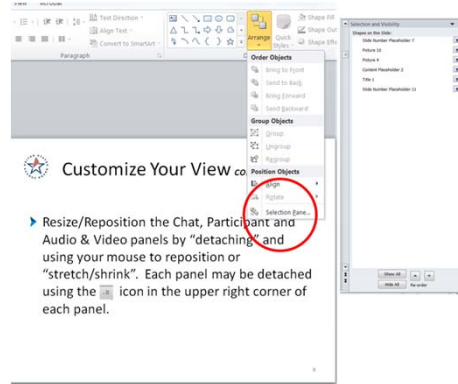
- Additional formatting may be required to ensure that the presentation materials are accessible when loaded into the webinar platform
 - Reordering of the “shapes” on a slide to ensure that a screen reader will read them in the correct order
 - The structure of a PowerPoint presentation will impact the order that a screen reader will read the content of a slide
- All slides should be numbered to assist participants in staying oriented to the order of the presentation.



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Organizing Slide Content

- Presentation should be constructed using established PowerPoint tools for formatting
 - Use of headers, fonts, content placeholders, etc.
- May need to manually reconfigure content order to ensure readability within the webinar platform by assistive technology
- Use of “selection pane” to reorder



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Preparing Materials

Presentation Materials (con’t) –

- Avoid using dark backgrounds
- Ensure high contrast of text on slide backgrounds
- Avoid use of “small text” (less than 18 pt)
- Use Slide Numbers to assist participants in orienting to where they are in a presentation



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Preparing Materials (2)

- Using Tables, Charts and Graphs
 - In the majority of platforms, the formatting for tables, charts and graphs is NOT maintained when Slides are converted to a White Board.
 - Additional formatting of the presentation slides may be needed to ensure content is readable by assistive technology within the platform.



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Use of Multi-Media Features Within Webinar Platforms

Video –

Video will launch differently depending on the platform.

- Know what formats are supported in the platform (.mp4, .mov, etc.)
- Instruct participants in advance regarding use of any multi-media so that they can ensure they are using the most up to date version of their media player or the video may not launch for them.
- Know your audience and their technical capabilities before choosing to utilize multi-media
- Ensure that videos are captioned (either open or closed)
- Consider need for audio description depending on the content of the video. Video images will not be accessible to someone who is blind.



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Use of Multi-Media Features Within Webinar Platforms (2)

- Streaming Audio –
 - Audio/Sound files may be used as long as captioning is available



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Features to Avoid Using

- **Drawing or “writing” on the Whiteboard** – many platforms have features which allow you to add text, images, draw directly on the whiteboard.
 - This application is not accessible to a screen reader



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Features to Use Cautiously

Interactive Features –

- **Hand raising, emotions, etc.** – these features can be distracting to participants with cognitive disabilities or those using other assistive technologies. Refrain from using these features while the presenter is talking.
- **Polling features** – Only utilize if these features are accessible to screen readers and available via key board commands.
- **Video Camera Feed** – The quality of video will depend on the bandwidth available. Caution should be used when incorporating this medium into a presentation. Audio Description may be needed depending on what the video feed contains.



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Features to Use Cautiously (2)

- **Desk Top Sharing** – many platforms allow the presenter to “share” their desktop with participants.
 - Limited access for a screen reader
 - Documents to be “explored” should be made available in advance
 - Presenter should be prepared to describe in detail all actions that they are taking and describe in detail anything that appear on the screen
 - Presenter should be encouraged to develop a “script” to ensure all steps and content are described
 - Queue participants when discontinuing the desk top sharing so that a screen reader user can switch focus back to the whiteboard



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Features to Use Cautiously (3)

- Web Tour – Many platforms allow the presenter to “launch” a web tour enabling participants following along.
 - Only the 1st web link can be followed by the screen reader user.
 - Once the presenter selects links within a website the screen reader loses focus and cannot read the content
 - Suggested: Presenter load each “link” separately so that a participant using a screen reader can follow the tour
 - » Queue participants when discontinuing the web tour so that a screen reader user can switch focus back to the whiteboard



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Recording/Archiving Sessions

Recorded/Archived sessions should provide the same level of accessibility as the live session did.

- Verify that recording captures the captioning and it is synchronous with the audio and video.
- Verify that the playback format is accessible with assistive technology (controls are labeled, content is able to be read with a screen reader, content is scalable, etc.)

Include a copy of all handout materials for download with the recording.

- Ensure that an accessible version is available (electronic/text)

Provide an Mp3 file for review of audio only



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Questions?

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

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SPEAKER CONTACT INFORMATION

Robin Jones, Director
Great Lakes ADA Center
guiness@uic.edu
312-996-1059 (V/TTY)



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Resources

- "How to Make Presentations Accessible to All"
 - <http://www.w3.org/WAI/training/accessible>
- PowerPoint Accessibility
 - <http://webaim.org/techniques/powerpoint/>
- Accessible Documents
 - http://aim.cast.org/learn/e-resources/accessibility_resources/docs_pres#.UwSuHxCuq3g



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