



### Real Life Accessibility: Software versus Disability-Based UX Testing

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

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### Useful Keyboard Shortcuts

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

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### More keyboard shortcuts

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

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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](mailto:webinars@ada-audio.org)



*Please note:* This webinar is being recorded and can be accessed on the website at [www.ada-audio.org](http://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”



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### 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.

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### 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)

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### 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](mailto:webinars@ada-audio.org); or
  3. Call 877-232-1990 (V/TTY)

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Software Accessibility Tools versus  
User Disability-Based Accessibility Testing

## REAL LIFE ACCESSIBILITY: SOFTWARE VERSUS DISABILITY-BASED UX TESTING



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### Your Presenters:

- Lynn Wehrman,**  
 President & Director of Accessibility  
 Services at WeCo Digital Services  
 – Accessible Web-Documents Specialist &  
 lives with cognitive-related disability
- Sue Ann Rodriguez,**  
 Lead Accessibility Specialist at  
 WeCo Digital Services  
 – Web Developer/JAWS User  
 & lives with sight-related disability





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## WeCo Digital Services

Provide our clients  
with usability-based  
accessibility testing  
and training services  
delivered by  
professionals who live  
with one or more  
disability.




Accessible. Aware. Independent.



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### Digital Accessibility: A Historical View

<p><b>Software-Based Testing:</b></p> <ul style="list-style-type: none"> <li>• Objective</li> <li>• Measureable</li> <li>• Hard Data</li> <li>• Clean</li> </ul> <p>= Tool-Based Analysis</p>	<p><b>Human-Based Testing:</b></p> <ul style="list-style-type: none"> <li>• Subjective</li> <li>• Not Measurable</li> <li>• Soft Data</li> <li>• Messy</li> </ul> <p>= People-Based Analysis</p>
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### For Reference: Human Based Testing Differences

<p><b>WeCo Testing</b></p> <ul style="list-style-type: none"> <li>• UX software testing methods</li> <li>• Uses only testers living with one/more of 4 primary disability classifications (<i>US Dept. of Human Services</i>)             <ul style="list-style-type: none"> <li>– Includes users who do not use devices for digital access</li> </ul> </li> </ul>	<p><b>Standard Human-Based Testing</b></p> <ul style="list-style-type: none"> <li>• Inventory-style “check list” testing methods</li> <li>• May be implemented by users who:             <ul style="list-style-type: none"> <li>– Do not live with disabilities</li> <li>– Visual impairment focused</li> <li>– Device focused</li> </ul> </li> </ul>
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WCAG Standards that cannot be verified with software

## TESTING FOR ACCESSIBILITY WITH SOFTWARE


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## Semi-Automated Accessibility Checkers

*“Such tools have significant limitations. There is no such thing as fully automated accessibility testing. For example, given the primitive nature of current artificial intelligence, a computer program cannot have the final say in whether some text is a genuine equivalent for a photograph in context. Even with areas that can theoretically be fully automated, checker programmers may err in their interpretation of accessibility guidelines and lose the spirit of the law amongst its letters.” –W3C*



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## Content and Layout

- CONTENT: Text and images on a page
- LAYOUT: How the content is positioned



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## Content and Layout

- What is its purpose?
- Pages, headings and information make sense?
- Content arranged in order?
- Content doesn't overwhelm?
- Use of color?
- Accessibility features disabled?



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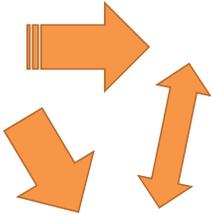
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## Navigation and Orientation

The user's ability to move through the target and use it for its intended purpose.



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## Navigation and Orientation



- Can location navigation and non-navigation links
- Links are labeled in a relevant fashion
- Properly titled frames

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## Page Consistency



How a target looks and feels when the user encounters it.

- Should look, feel and sound the same from page to page.

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## Objects and Images

May include: maps, tables, graphs, illustrations, photographs.



- Alternative text tags: the word "image" doesn't cut it

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## Audio and Video



When info is conveyed through sound and visuals, it should be accessible to everyone.

- Recheck all captioning: don't rely on auto translation.

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## Forms

May include applications as well as search boxes.

- All fields are accessible
  - Do labels make sense?
- Don't "time out"
- Fixes for errors delivered in timely accessible fashion



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False positives and negatives

### SOFTWARE TESTING OUTCOMES AND ACCESSIBILITY

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### Software and False Readings

*“Unfortunately, although there are lots of accessibility tools, most of them are flawed in one way or another. For example, one tool that lists headings in HTML documents makes the error of not including alt text from img elements. Just as you should keep the spirit of the law in mind with standards compliance, so you should keep it in mind when using tools.” –W3C*

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### Common False Readings



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Finding a balance that is meaningful to real life accessibility

### TESTING WITH PEOPLE AND SOFTWARE



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### Why use a tool at all?

*“The use of a good automated tool can mean significant improvements in productivity and in the accuracy of results. Users of the tools, however, must understand that their automated tool is just that – a tool – and that they **must not rely on the tool to be the final determining factor in whether their site is accessible.**”*

-Karl Groves,  
Web Accessibility Consultant, Developer and Viking



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### Software + Testers Living With Disabilities = Winning Combo

- More likely to catch large issues up front
- Excellent teaching tool for staff new to accessibility
- Produce cleaner user testing results



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### Using Testers Who Do Not Live With Disabilities



I'm not really a tester living with a disability, I just play one on television.

- You cannot “simulate” a person’s disability experience
- Learning to use a device or tabbing through a screen is not a replacement for that experience

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### Using Testers Who Live With Disabilities: A Question of Trust

- Do they know what they need?
- Can they tell us what they need?
- Is software a faster, more efficient way to do it?



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### Why am I not including users/testers who live with disabilities?



- Lack of understanding
- Loss of control
- Lack of access
- Fear.....
  - Discomfort
  - Don’t want to hear what won’t work

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### What is the opportunity I'm missing?

- Valuable source of user information!
- Amazing solutions!
- New resources!
- Empowerment...
  - Confidence
  - Connection
  - Solutions that truly work



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### How can I engage users/testers who live with disabilities?

- Engage them professionally
- Locate them in your audience
- Respect them as SME's
  - Compensate them as you would any other expert



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### Time for your questions: we're ready!



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### Thanks for joining us!

Use our free resources and keep in touch with us.

WeCo's Free Accessibility Library. Blog and QuickTip emails: [theweco.com](http://theweco.com)

WeCo's Accessibility Team: [accessinfo@theweco.com](mailto:accessinfo@theweco.com)

OR

855-849-5050 x1



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Thank you for participating!

**NEXT SESSION IS SEPTEMBER 15, 2016**

*Speaking the Same Language:  
Making Closed Captioning Work*

The session today was recorded  
and will be archived at  
[HTTP://ADA-AUDIO.ORG/ARCHIVES/ACCESSIBLETECH/](http://ada-audio.org/archives/accessibletech/)

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