



## Online Video Accessibility

Session Begins 1:00 pm CST

Periodic Audio Testing Occurring

## Useful Keyboard Shortcuts

- 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

## 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

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:

**712-432-6297**

**Pass Code:**

**558341#**

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.

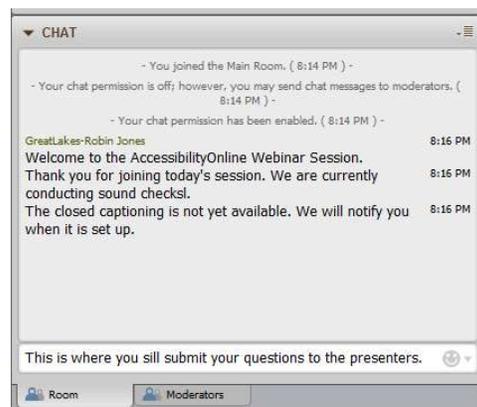


- Once selected you will have the option to resize the captioning window, change the font size and save the transcript.

7

# 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.

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

11



## Online Video Accessibility

September 20, 2018

Terrill Thompson, University of Washington

12

## About the UW

- Disability Resources for Students (DRS)
  - Makes videos accessible as requested for individual student accommodations
- Disability Services Office (DSO)
  - Provides individual accommodations for employees and public
- UW-IT Accessible Technology Services (ATS)
  - Works proactively to make IT accessible throughout the university (including videos)
  - Includes the DO-IT Center (Disabilities, Opportunities, Internetworking, & Technology), promoting inclusion and success for people with disabilities since 1993
  - AccessComputing – a partnership between DO-IT, School of Computer Science & Engineering, & the Information School, funded by NSF to increase participation of people with disabilities in computing fields



13

## Video accessibility issues

1. Users can see video, but can't hear audio
  - **Solution:** captions
2. Users can hear audio, but can't see video
  - **Solution:** audio description
3. Users can't see or hear video/audio
  - **Solution:** transcript
4. Users are:
  - Using keyboard only (no mouse)
  - Using a screen reader
  - Using speech input
  - Dependent on high contrast / custom color scheme
  - **Solution:** An accessible media player

14

## Legal Background

- Many of us are required to provide accessible programs, services, and resources via federal law:
  - Section 504 of the Rehabilitation Act (1973)
  - Americans with Disabilities Act (1990)
- Many of us also have state and/or organizational policies that require IT accessibility
- In recent years, formal complaints and legal actions have been accelerating against higher education institutions for inaccessible IT (including videos)
- The standard applied in all cases:  
W3C Web Content Accessibility Guidelines (WCAG) 2.0 Level AA

15

## WCAG 2.0

- Became an official "W3C recommendation" in 2008 (WCAG 1.0 was published in 1999)
- Four principles:
  - Perceivable
  - Operable
  - Understandable
  - Robust
- 62 specific success criteria
  - Level A — 26 success criteria
  - Level AA — 13 success criteria
  - Level AAA — 23 success criteria



16

## WCAG 2.0 and Video

- Captions on recorded videos (Level A)
- Audio description *or* transcript (Level A)
- *Live* captions (Level AA)
- Audio description (Level AA)
- Sign Language (Level AAA)
- Extended audio description (Level AAA)
- Transcript (Level AAA)

17

## How UW Does Accessible Video

- Disability Resources for Students (DRS) and Disability Services Office (DSO) provide funding and support for captioning and audio description if individuals request it as an accommodation
- UW-IT Accessible Technology Services (ATS) provides internal grant funding for captioning high impact videos proactively
- ATS provides training and support

18

## Why Making Accessible Video Isn't an Undue Burden

- Cost of Producing a 10-minute documentary-style video: \$10,000
- Cost to caption (@ \$2/min) = **\$20 (0.2%)**
- Cost to describe (@ \$10/min) = **\$100 (1%)**

19

## However...

- Making legacy videos accessible *would* be costly
  - 88 known UW-affiliated YouTube channels
  - Nearly 10,000 videos
  - Over 3,000 hours of programming
  - Cost to caption (@ \$2/min) = \$360,000
  - Cost to describe (@ \$10/min) = \$1.8 million
  - YouTube comprises only a small segment of our total video library (videos in Vimeo, Panopto, etc.)
- Therefore, we need to **prioritize and make progress**

20

## Which videos are the highest priority?

- Videos that are required viewing for students who **need** description (an accommodation)
- Videos that are **likely** to be required viewing for students who **need** description
- Videos that:
  - Are popular
  - Are relatively new
  - Provide critical content

21

## YTCA can help with prioritizing.

### YouTube Caption Auditor (YTCA)

Use the following form to generate a report regarding the indicated YouTube channel(s). For YTCA source code and documentation, see [YTCA on GitHub](#).

<b>YouTube Channel</b> YouTube Channel ID: <input type="text"/> URL to Channel ini File: <input type="text"/>	<b>Output</b> Report Type: <input type="text"/> Format: <input type="text"/>	<b>Filter</b> Filter results by: <input type="text"/> Filter value (X): <input type="text"/>
<b>Dates</b> Published after (MM-DD-YY): <input type="text"/> Published before (MM-DD-YY): <input type="text"/>	<b>Options</b> <input type="checkbox"/> Include a <i>Channel ID</i> column in the report (HTML Summary report only) <input type="checkbox"/> Debug mode (show YouTube API query URLs)	

<https://github.com/terrill/ytca>

22

## UW-IT Captioning Service

UW-IT funding is available to caption:

- Videos available to the public on a high-use website
- Videos that will be used multiple times in a course
- Videos developed by several faculty members to be used in several different classes

23

## UW-IT Captioning Service (2 of 2)

- Interested parties submit an application for assistance
- Applications are reviewed promptly by a small committee
- If accepted, ATS provides funding and support to get the videos captioned
- Funding is seed money, designed to:
  - Help units get started with their captioning efforts
  - Create positive models of high profile captioned videos, and partners who can help promote captioning throughout the university

24

## Audio Description: A Variety of Flavors

- Separate "audio described version" of the video
  - Human-narrated description
  - Description narrated using synthesized speech
- A WebVTT description file
  - Plain text, easy to produce
  - Description is read aloud by screen readers
  - The standard method, using HTML5 <track>
  - Currently only supported in Able Player
- A second, user-selectable, audio track
  - Uses one method for all audio tracks (e.g., audio description, director's cut, translated/overdubbed)
  - Supported in JW Player and Video.js (but not in all browsers; depends on HLSV4 support)

25

## WebVTT Format

- Stands for "Web Video Text Tracks"
- <https://w3c.github.io/webvtt/>

```
WEBVTT

00:00:00.000 --> 00:00:02.000
Ana Mari Cauce, President, University of Washington

00:00:40.000 --> 00:00:44.000
Tracy Mitrano, Director of IT Policy, Cornell University

00:01:22.000 --> 00:01:32.000
Edward Ray, President, Oregon State University
```

26

## How it works in HTML5

```
<video>
  <source type="video/mp4" src="path_to_video.mp4">
  <track kind="captions" src="path_to_captions.vtt" srclang="en" label="English">
  <track kind="subtitles" src="path_to_es.vtt" srclang="es" label="Español">
  <track kind="descriptions" src="path_to_desc.vtt">
  <track kind="chapters" src="path_to_chapters.vtt">
</video>
```

27

## How can we create our own WebVTT description track?

- Simply use your favorite text editor (e.g., Notepad)
- Use any captioning tool
  - Amara.org
  - Dotsub.com
  - NCAM Caption and Description Editing Tool (CADET)  
<http://ncamftp.wgbh.org/cadet/>

28

## Outsource vs DIY

- If description is minimal and simple, and if you're using Able Player
  - Do it yourself! Create a WebVTT file.
- Else if it's a dramatic work
  - Outsource for human-narrated description
- Else
  - Outsource for human-narrated description *OR*
  - Outsource for text-to-speech description

29

## A few audio description vendors

- Human-Narrated (\$12-15/min)
  - [Access USA](#)
  - [Audio Eyes](#)
  - [Caption Max](#)
  - [Mind's Eye Audio Productions](#)
  - [Valerie H Productions](#)
  - [WGBH Media Access Group](#)
- Synthesized Speech (\$10/min)
  - [3PlayMedia](#)
  - [Automatic Sync](#)

30

## How can we deliver a "described version"?

- Add a link: "Available with audio description"
- Use Able Player
  - Supports multiple versions of a video (described vs non-described); user can toggle using "Description" button
  - Supports text-based audio description, announced by screen reader; user can toggle using "Description" button

31

## Example Link to Described Version



Source: <http://uw.edu/president/2016/12/21/best-of-uw/>

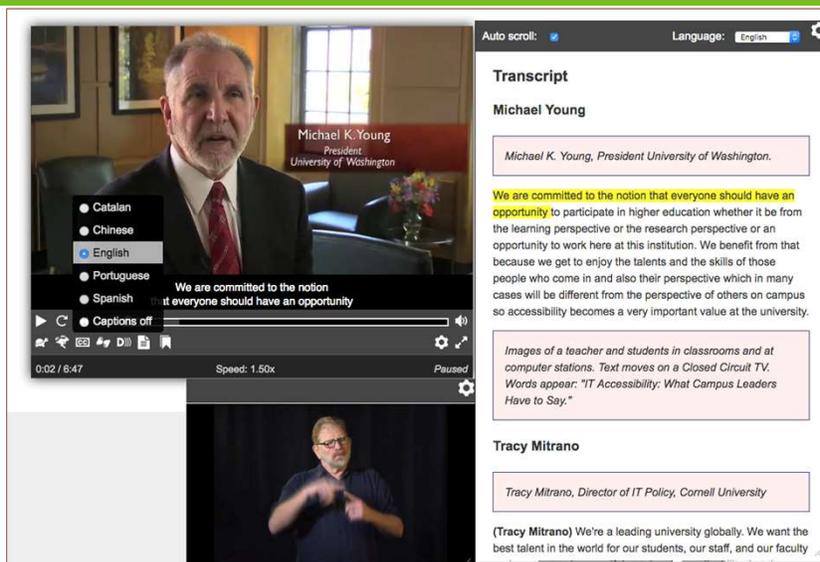
32

# Able Player

- <https://ableplayer.github.io/ableplayer>
- Free, open source, HTML5 media player
  - Full support for HTML <track> element (captions, subtitles, descriptions, chapters, & metadata)
  - Chapters, captions, & descriptions are automatically assembled into an interactive transcript
  - Fully accessible player controls
  - Supports multiple versions of a video (described vs non-described); user can toggle using "Description" button
  - Can play YouTube videos

33

# Able Player Screen Shot



34

## Able Player is just HTML

```
<video data-able-player>
  <source type="video/mp4" src="path_to_video.mp4">
  <track kind="captions" src="path_to_captions.vtt" srclang="en" label="English">
  <track kind="subtitles" src="path_to_es.vtt" srclang="es" label="Español">
  <track kind="descriptions" src="path_to_desc.vtt">
  <track kind="chapters" src="path_to_chapters.vtt">
</video>
```

35

## For More Information...

- UW Accessible Technology  
<http://uw.edu/accessibility>
- Creating Accessible Video  
<http://uw.edu/accessibility/videos>
- DO-IT Videos  
<http://uw.edu/doit/videos>
- AccessComputing  
<http://uw.edu/accesscomputing>

36

# QUESTIONS

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

Online Video Accessibility

37

Thank You For Your Attention!

- Terrill Thompson  
tft@uw.edu

38



The session today was recorded  
and will be archived at  
**[www.ada-accessibletech.org](http://www.ada-accessibletech.org)**

**NEXT SESSION IS *NOVEMBER 15, 2018***  
***(CREATING ACCESSIBLE DOCUMENTS WITH INDESIGN)***

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

39