



# Accessible Video: Delivering a More Inclusive Learning Experience

Geraud Plantegenest, MA  
Digital Learning Manager – Web Accessibility Liaison  
College of Human Medicine, Michigan State University

# Outline

- Background
  - Why Accessible Video?
- Methods
  - System, technologies used
- Results
  - Lessons learned & impact
- Recommendations
  - Insights, key takeaways, resources

# Background: Why Universally Accessible Content?

- User have different needs



# Background: Why Universally Accessible Content?

- MSU – CHM five-year web accessibility plan
  - Federal mandate (ADA), campus-wide policy (commitment to accessible digital experiences).
- Provide ease of access and choices to users (learners)
  - Implementing Universal Design for Learning (UDL) framework.
  - Retrofit and create new content for accessible playback (e.g., video with captions, transcripts, accessible player, tagging, search function).
- Priority
  - Move needle on compliance for public-facing websites and related resources.
  - Low-hanging fruit (easy to fix) issues, high-yield results
  - Low cost, fast implementation, tangible results.

***“Access by everyone  
regardless of  
disability is an  
essential aspect.”***

Tim Berners-Lee, W3C Director and  
inventor of the World Wide Web

## Methods: Systems and Technologies used

- **Kaltura MediaSpace**
  - Institutional platform
  - Mostly curricular video
- **Vimeo**
  - Third-party video delivery platform
  - Used for public-facing videos
  - Platform for delivery of our main college website multimedia
- **Captioning options**
  - Manual captioning
  - Machine captioning (Kaltura MediaSpace, YouTube)
  - Rev.com
    - Third-party service, quick turn-around, low cost per min., accurate
    - Integration with Kaltura and Vimeo platforms

# Results: Who Benefits from Video Captioning?

- People who are:
  - deaf and cannot hear the audio
  - hard of hearing and cannot hear some of the content
- People with cognitive and learning disabilities who need to see and hear the content to better understand it.
- Content can be used in:
  - loud environments where you cannot hear the audio
  - in silent environments where you cannot turn on sound
- Content can be:
  - better understood by people hearing and seeing the information (e.g. non-native speakers)
  - read rather than watched, which is easier and quick for some people for some types of videos



# Results: Lessons Learned

- **How workflow has changed**
  - New service for captions
  - Add 1-2 days for processing and editing captions
  - Download captions to use on other platforms
- **Changes in filming**
  - Allow more space at the bottom frame of video for captions



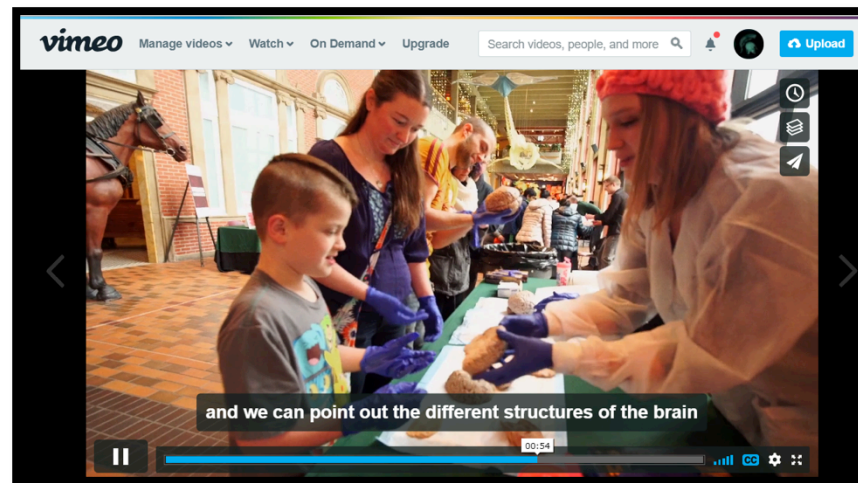
# Recommendations: Challenges and Insights

## ■ Negatives:

- Adjust timelines
- Additional cost
- Challenges accommodating real-time captioning during live streams

## ■ Positives:

- Repurposing across platforms (e.g., Facebook, Twitter, etc.)
- Tapping into other video trends
- Much higher view rates!





# Key Takeaways

1. Think about video accessibility from the start
  - Video is a powerful medium to extend and maximize audience reach
2. Seek out institutional support and resources
  - General approaches for video captioning: Do it yourself vs. outsourcing
3. Evaluate existing & new tools for accessibility
  - Choose an accessible media platform to deliver your video content
4. Repurpose captions on other platforms for greater impact

# Resources

- Stamford Interactive Link: [A Guide to Accessible Video](#)
- Online transcription, captions, translation service
  - Link: [Rev.com](#)
- Video hosting and sharing platforms:
  - Link: [Vimeo.com](#)
  - Link: [Kaltura](#)
  - Link: [YouTube.com](#)

## A guide to accessible video

Pre-production & video file	Alternative content	Video player
<p><b>Ensure all relevant information is recorded</b> (WCAG 2.0 - Level A, 1.1.1) Unscripted content is sufficiently described in text and audio, such as describing a 'show of hands' result in the audience.</p> <p><b>Describe relevant sensory characteristics and use of colour</b> (WCAG 2.0 - Level A, 1.3.3 and 1.4.1) If particular noises, shapes or colour are essential to understand the video, they are described in the transcript, captions and audio description.</p> <p><b>Write dialogue at a level your audience will understand</b> (WCAG 2.0 - Level AAA, 3.1.3, 3.1.4 and 3.1.5) Scripts are understandable by your target audience, including all text, narration and dialogue.</p> <p><b>No flashes more than 3 times a second</b> (WCAG 2.0 - Level A, 2.3.1, Level AA, 2.3.2) Video does not contain content that flashes more than 3 times a second, as they may cause seizures in people who are photosensitive.</p> <p><b>Ensure sufficient colour contrast between text and background</b> (WCAG 2.0 - Level A, 1.4.3, Level AAA, 1.4.6) There is a colour contrast ratio of at least 4.5:1 between text and its background.</p> <p><b>Low background noise</b> (WCAG 2.0 - Level AAA, 1.4.7) Non-speech background audio is low enough so that foreground speech can be easily heard.</p>	<p><b>Provide an accurate text equivalent</b> (WCAG 2.0 - Level A, 1.2.1, Level AAA, 1.2.8) There is an accurate text equivalent of the video provided on the same page or a link to the text is available. This could be a transcript or a screenplay describing the video.</p> <p><b>Provide captions for all audio content</b> (WCAG 2.0 - Level A, 1.2.2, Level AA, 1.2.4) There are text equivalents of the audio that are synchronised to the video track. These can be open or closed captions. If there is no audio, state that there is no sound used on the video clip.</p> <p><b>Provide an alternative to the media</b> (WCAG 2.0 - Level A, 1.2.3, Level AA, 1.2.5, Level AAA, 1.2.7) There is a narrative that describes the visual details of the video. This can be in text form for Level A (it could be a part of the transcript) or an audio description synchronised to the video for Level AA.</p> <p><b>Provide a sign language track</b> (WCAG 2.0 - Level AAA, 1.2.6) There is a sign language interpretation track synchronised to the video stream, either on the video or in a separate window.</p>	<p><b>Video controls are keyboard friendly</b> (WCAG 2.0 - Level A, 2.1.1, Level AAA, 2.1.3) The video player controls, such as play, pause, etc are operable with a keyboard in addition to pointing devices such as a mouse or a joystick.</p> <p><b>No keyboard trap in the player</b> (WCAG 2.0 - Level A, 2.1.2) On focus the player does not trap keyboard focus or require a mouse to receive focus.</p> <p><b>Provide basic video controls</b> (WCAG 2.0 - Level A, 1.4.2, 2.2.1 and 2.2.2) Viewers can stop, play, pause and control the volume as required.</p> <p><b>Do not auto-play videos on page load</b> The video does not auto-play on page load as this may disrupt the viewers, especially if they are using a screen reader.</p> <p><b>Do not assume your viewers have the latest technology</b> Viewers may not have support for certain browser features or technologies that video players rely on. Use progressive enhancement to deliver the most basic content first, such as a link to download the video file and a text transcript, then progressively enhance the video experience for those who have more advanced browsers.</p>

**Viewers have different needs**

- AD** I need to hear a narration of the visuals
- CC** I need to read the captions
- sg** I need a sign language interpretation
- TXT** I need to read a text version
- Talk** I need to get to all the controls by keyboard

Designed by Stamford Interactive [www.stamfordinteractive.com.au](http://www.stamfordinteractive.com.au) referencing the Web Content Accessibility Guidelines (WCAG 2.0), available at: <http://www.w3.org/TR/WCAG20/>

**stamford**  
BETTER EXPERIENCES

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.

©creative commons