Creating Accessible Video and Audio

Creating accessible video and audio is an expectation for all videos as outlined in the of the American with Disabilities Act. Accessibility includes captions, descriptions, transcripts, and the ability to navigate a video using just the keyboard. View this presentation found at, <https://dcmp.org/learn/520>, click on the video, to experience how a low-vision and non-hearing person would experience a presentation. Hopefully by viewing the presentation, you will understand the requirements for captions, descriptions, and keyboard navigation. Frequently instructors are not aware of students with disabilities. Many typical students find captions, descriptions, transcription, and keyboard navigation helpful for their learning. One example is a student watching a video while on a work-break with the sound off.

# Captions

Captions are text versions of the audio content, synchronized with video. They are essential for ensuring your video is accessible.[[1]](#endnote-1)

There are two general approaches to captioning video plus one Highland offers:

* Outsource. Outsourcing can either create a transcript or create the captions for you. Both are fee-based services, approximately $1 per minute.
* Do it yourself. YouTube has the ability to add captions to video once video is uploaded
  + Adding captions to YouTube videos
    - [\\Data\group\ATR\Help\_and\_How-To\YouTube\Automatically creating caption files for YouTube videos\_2019\_03\_04.pdf](file:///\\Data\group\ATR\Help_and_How-To\YouTube\Automatically%20creating%20caption%20files%20for%20YouTube%20videos_2019_03_04.pdf)
    - Also found in Faculty/Staff portal, Faculty Support pages
  + Adding captions to videos on web page
  + Adding captions using video editing software.
* Use of video-hosting platform such as Panopto, which Highland has a subscription for
  + Creates machine generated captions
  + Must be edited to achieve 99.9% accuracy
    - No capitalization
    - Little punctuation
  + More information may be found on the Faculty Support page

## Do It Yourself Captioning, Typically Free

There are several free online tools, including:

* [Amara.org](https://amara.org/en/)
* [DotSub.com](https://dotsub.com/)
* [Subtitle Horse](http://subtitle-horse.com)

Create a free account at any of the above sites. The process for creating captions using each tool is approximately the same:

1. Upload the video to the web (YouTube, etc. you may keep the video private, don’t publish its URL).
2. Provide the video’s URL to the captioning service. Some services also support uploading a video directly to their site.
3. Use the service’s captioning tool to watch the video and transcribe it. Caption text is displayed in real time on the video as you type.
4. Review and edit the captions to be sure they’re accurate and easy to follow. The Described and Captioned Media Program (DCMP) provides a [Captioning Key](https://dcmp.org/learn/520) with guidelines for effective captioning.
5. Download the captions as a caption file in the appropriate format for your needs.

# Audio Description

Audio description is a separate narrative audio track that describes important visual content such as the action, settings, facial expressions, costumes, and scene changes, making it accessible to people who are unable to see the video. Individuals who are blind can understand much of a video’s content by listening to its audio. However, if a video includes content that is only presented visually (e.g., on-screen text or key actions that are not obvious from the audio) this visual information must be described in order to be accessible to people who are unable to see it.

Like captions, there are two general approaches to producing audio description for video:

* Outsource
* Do it yourself

## Outsourcing Audio Description

The American Council of the Blind has compiled a comprehensive list of [commercial services for producing audio description.](http://www.acb.org/adp/services.html) The following subset of organizations provides description services at prices and turnaround times that seem to be a good match for higher education institutions:

* [3PlayMedia](http://www.3playmedia.com/services-features/services/audio-description/) (output uses synthesized speech)
* [Automatic Sync](http://www.automaticsync.com/captionsync/service-list/audio-description-example/) (output uses synthesized speech)
* [Access USA](http://www.access-usa.com/)
* [AMAC Accessibility](http://www.amacusg.org/captioning.php)
* [Audio Eyes](http://www.audioeyes.com/)
* [Captionmax](http://www.captionmax.com/)
* [Mind’s Eye Audio Productions](http://mindseyeaudio.com/)
* [Valerie H Productions](http://www.valerie-h.com/)
* [WGBH Media Access Group](http://www.wgbh.org/about/disabilityservices.cfm)

The typical deliverables provided by professional audio description services are either an audio file with soundtrack and description mixed together, or an audio described version of the video, with the described audio replacing the original program audio. In either case, these can be made available to users by announcing that the video is “Also available with audio description”, where “audio description” is a link to the described version.

## Do It Yourself

An alternative method for delivering audio description is a timed text file, similar to a closed caption file. For videos that have very little visual-only information, this can be a much simpler, lower cost method of adding a few brief instances of description. A common example is video that includes on-screen text that isn’t verbalized in the audio track, such as the name of the speaker. A timed text file can be created using the same free online tools that are used for creating closed caption tracks. For additional information about these tools, see the section titled, “[Captioning your own video for free](https://www.washington.edu/accessibility/videos/free-captioning/)”. Description tracks are essentially the same as caption tracks—short blocks of text with timestamps that synchronize the text with the video—but their function is different. They are intended to be read aloud by screen readers or media players, rather than voiced by a human narrator.

## Playing video with text-based audio description requires a media player that supports this feature, such as [Able Player](http://ableplayer.github.io/ableplayer/), <https://ableplayer.github.io/ableplayer/>, the open source media player developed at the University of Washington, <https://www.washington.edu/accessibility/videos/>.

# Live Captioning and Description

If live events are simulcast over the Web, live captioning is needed in order to provide access to the audio content for audience members who are deaf or hard of hearing. Similarly, live description may be needed if key visual content will otherwise not be verbalized, such as in a dramatic production. At the University of Washington, these services are coordinated through the [Disability Services Office](http://www.washington.edu/admin/dso/) or [Disability Resources for Students](http://depts.washington.edu/uwdrs/). Please contact either of these offices to learn how to request these services.

# Transcript

A transcript is a text version of media content including all spoken audio plus background noise that would not be accessible without hearing the audio. Transcripts make audio content accessible to everyone, including those who are unable to listen to audio or watch video content due to accessibility problems or technical limitations.[[2]](#endnote-2)

# Choosing an Accessible Media Player

Whether you are selecting a media player plugin or module for your website or selecting a service to host your videos, the following questions should be answered about the available options:

1. Does the media player support closed captions?
2. Does the media player support audio description in a way that enables users to toggle the narration on and off?
3. Can the media player’s buttons and controls be operated without a mouse?
4. Are the media player’s buttons and controls properly labeled so they can operated by a blind person using a screen reader?
5. Is the media player fully functional, including all of its accessibility features, across platforms and in all major browsers?

Some accessible media players are Able Player, <https://ableplayer.github.io/ableplayer/>; Kaltura Player, and Plyr, <https://plyr.io/> to name a few.

Creating captions, descriptions, transcriptions, and using an accessible player does take time. Research has found many students state the addition of these services improve their learning, not just the students requiring accommodations. Help your students learn by incorporating these best practices, not just because it is the law.

1. <https://it.wisc.edu/guides/accessible-content-tech/create-accessible-video-and-audio-content/> accessed 3/13/19 [↑](#endnote-ref-1)
2. <https://it.wisc.edu/guides/accessible-content-tech/create-accessible-video-and-audio-content/> accessed 3/13/19

   <http://disability.illinois.edu/academic-support/accessible-it-group/resources> section for Media Captioning Services to review including Illinois Information Technology Accessibility Act requirements for captioning and audio description of videos, found at https://www.dhs.state.il.us/page.aspx?item=32765 [↑](#endnote-ref-2)