Creating Accessible Video for the Online Classroom

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Introduction

From Youtube to Khan academy, online videos are everyone. As a result, online videos are being integrated more and more each day into the online classroom. Videos are used to enhance learning, improve retention, and increase student motivation. However, the use of video can create barriers for some learners if they are not created in an accessible manner. For example, a deaf or hard of hearing person cannot access videos without a transcript or closed captioning; a blind person will not know what is happening on the screen without audio description or verbalizations of actions in the video; and keyboard-only users (e.g., those with physical limitations) need to be able to control the video (play, pause, exit) without using a mouse. Given this, it is important to create video that is accessible to all learners. Being accessible means those with disabilities are able to independently access the same information, in the same time, with subsequent ease of use as those without disabilities. In the following paragraphs, we remove some of the mystery of accessible video by explaining the law, addressing some common questions, and sharing some useful resources.

The Law

When it comes to video, faculty should be aware of three laws:
- Section 504 & 508 of the Rehabilitation Act;
- Americans with Disabilities Act;
- 21st Century Communications and Video Accessibility Act (CVAA).

Section 504 & 508 of the Rehabilitation Act

https://www.disability.gov/rehabilitation-act-1973/

The Rehabilitation Act prohibits discrimination based on disability. Section 504 of the Rehabilitation Act specifically requires federal institutions that receive federal funding to accommodate individuals with disabilities. This applies to higher education institutions. Section 508 was later added to the Rehabilitation Act in 1998. While it does not explicitly demand programs that receive federal funding make electronic and information technology (EIT) accessible, there is a refresh of Section 508 that is working toward this goal. It would be in institution's best interest to work as if this 508 refresh made this explicitly clear. EIT may include, but is not limited to, the internet and intranet websites, content delivered in digital form, electronic books and electronic book reading systems, search engines and databases, learning management systems, classroom technology and multimedia, copiers and fax machines, telephones, information kiosks, software, firmware and related resources. The Rehabilitation Act is the foundational

piece of legislation that requires video used in online courses to be accessible to deaf and hard-of-hearing individuals.

Americans with Disabilities Act

http://www.ada.gov

The Americans with Disabilities Act (ADA), originally passed in 1990, is a wide-reaching civil rights act prohibiting discrimination based on disability. It addresses employment, public entities, private entities, telecommunications and miscellaneous provisions. In 2008, the ADA was updated, with the Act clarifying and expanding the definition of a disability as a limitation of a major life function. This included a broader array of disabilities that were not previously considered as a disability under the ADA. The ADA prevents discrimination in several public arenas such as state and local governments, hotels, restaurants, movie theaters, museums, libraries, doctor's offices, daycare, gyms, and institutions of higher education.

21st Century Communications and Video Accessibility Act (CVAA)

https://www.fcc.gov/guides/21st-century-communications-and-video-accessibility-act-2010

The Century Communications and Video Accessibility Act, while not applicable to most classrooms, requires closed captioning for online video content that was initially aired on television. Content that was aired only online, however, is not covered by CVAA.

Universal Design

While adhering to the aforementioned laws is important and reason enough to create accessible video, it is important for educators to remember that accessible video is just one example of using universal design that helps all learners. Like how sidewalk curb cuts helps wheelchair uses, strollers, moving companies and bikers, accessible video will reach the deaf, blind, persons with limited mobility, English language learners, fatigued eyes, diminished hearing and individuals new to the content. By providing accessible videos, everyone has the opportunity to consume information in a way that is beneficial to them.

Common Questions About Accessible Video

The following are common questions we hear on our campuses.

Do I have to caption all video I use or only video I create? What about optional videos?

Your college or university is liable for any and all parts of the curricula used in your course. This includes any content you create, link to, use, display, distribute, require or use as a supplemental resource. The best advice is to only use content that is captioned.

Do I have to caption videos if I don't have students with disabilities in my courses yet?

All video used in your courses should be accessible whether there is student with a disability currently or not. Harvard and MIT recently were sued because videos shared as open educational resources were not captioned.

- [edX Settles With Department of Justice](#)
- [edX Settles Disability Lawsuit in Deal With DOJ](#)
- [Harvard and MIT Face Lawsuit for Lack of Online Captioning](#)

Can I Provide a Transcript Instead of Captions?

A transcript makes it challenging for a deaf or hard-of-hearing student to absorb the visual and auditory information simultaneously in a video. Therefore, including captions which provide real-time access, is the preferred method of making video accessible.

Will I Be Notified If I Need to Caption Videos for a Deaf or Hard-of-Hearing Student in My Course?

Yes. The disability services office at your institution should officially notify you (e.g., a letter, memo or email) if there is a student in one of your courses with a disability.

Who Is Responsible for Captioning?

In our experience, every institution deals with captioning video differently. While many argue that faculty are ultimately responsible for making the content in their courses accessible, we have found that most disability services will assist in making videos accessible--whether that be by paying to have the videos captioned or helping faculty personally transcribe them--once a student with a disability is signed up for a course. If you want to caption online video outside of a specific request, your department or other entity on campus may be the one to pay or they may expect you to caption the videos yourself.

How Long Does it Take to Caption a Video?

The time it takes to caption a video depends on several factors like: the length of the video (2 minutes vs. 60 minutes), the quality of the video (is the speaker easily heard?), who is doing the captioning (an outside vendor, on campus resource or yourself?), is there specialized content (like medical terminology?) and so forth. Therefore, we recommend faculty construct all courses with accessibility in mind.

What If I Have Last Minute Changes to the Videos I Want to Show?

You always have the right to add or remove video from your courses. However, keep in mind how changing video could put a student with a disability at a disadvantage if the video is not accessible. Weigh the cost of rushed captioning against the value the video would add to your course.

Captioning Strategies

At the end of the day, the number one way to create accessible video is to caption it. The question then is whether you will do it yourself or whether someone else will caption it for you. The following are a few ways to caption the online videos used in your courses.

Do It Yourself

A common way to caption videos is to do it yourself. Providing accessible, captioned videos consists of two parts: creating the transcript then synchronizing or merging the transcript with the video. Below are some popular strategies faculty use.

Part 1 for Captioning Videos: Create the Transcript

- **Manual Creation:** Type a script before you create the video. This script can then be converted (e.g., by uploading it to Youtube) into captions. This option can work well for faculty comfortable following a script but can be very challenging for faculty using video in a less scripted manner (e.g., instructional screencasts of software).
- **Desktop Software:** If you are already using a speech-to-text software like Dragon Naturally Speaking (for PC), you can speak your script into the computer to create a transcript. This transcript can be then uploaded with a video file through a free tool like YouTube or be sent along with a video file to a paid service.

After a transcript is created, the next step is to sync or merge the transcript with the video file.

Part 2 for Captioning Videos: Sync Transcript with Video

- **Web-based Software:** There are also a number of web-based applications that can be used to create a transcript or add captions directly to a video. Youtube's captioning tool is a popular option. YouTube uses speech recognition to create automatic captions for uploaded videos. If creating a script is too time-consuming, leverage YouTube to do the work to create a rough draft that you can then edit. Other options include [Amara](#) and [OverStream](#).

Screen Capture Software and Creating Captions

- **Desktop Software:** Some lecture capture or presentation creation software have a built-in captioning feature. For example, Captivate allows you to (a) create a presentation, create a transcript separately then sync the words with the video to create captions or (b) create a presentation, export audio, submit audio to a vendor for captioning where they use speech-to-text software to have the computer create a transcript, then sync the words with the video to create captions. Camtasia Studio is another popular option. You can add captions manually with Camtasia Studio or use its speech-to-text tool to create the transcript (please note, the captioning feature is currently only available for a PC; the Mac version of Camtasia does not have this capability). In our experience, some faculty find using Camtasia Studio easier than others.

The bottom line though is that creating accessible video takes time. It either takes time to write the transcript before you start recording or it takes time after to listen and caption each word for word; even speech-to-text tools take time to check the text it generates. So be sure to plan accordingly!

Pay for it: Commercial Providers

Given the time it takes to create captions yourself, many colleges and universities often use commercial providers to caption the videos they use in their online courses. Commercial providers can (a) create or edit a transcript only, (b) sync or merge the transcript to a video or (c) create an interactive transcript that is searchable by word. They can also translate videos and even add transcripts to videos that you didn't create and do not own. Rev.com is a popular option. You can get captions in 24-48 hrs for as little as $1 a minute. Other options include:

- Automatic Sync Technologies
- 3play Media
- Alternative Communication Services (ACS)
- DocSoft
- Strada Communication
- U.S. Captioning Company
- Cielo24
- CaptionMax
- WideCaptioning

Pay for it: Freelancers

One last option is to pay a freelancer to create a transcript for you. For instance, Fiverr.com lists dozens of freelancers who will caption 15 minutes of video for only $5. They often charge more if you have multiple speakers or need it quickly. However, if you have some flexibility, Fiverr.com (or other freelancers) might be the cheapest way to get a transcript created and therefore extremly useful if you are paying for transcripting / captioning services out of your own pocket.

Additional Resources

Still looking for more support, check out these two websites:

- **University of Washington: Caption Your Own Video for Free**
  http://www.washington.edu/accessibility/videos/free-captioning/
  This website covers topics such as: Captioning your own video for free; How to add caption files to video; Adding captions to YouTube videos; and Adding captions to videos on web pages to name a few.

- **DCMP: Caption it Yourself**
  https://www.dcmp.org/ciy/
  This website explains things such as: What's in a Caption?; The Benefits of Captions; Web-based Captioning/Subtitling Tools; Desktop Captioning/Subtitling Software; Caption-Ready Video Hosting Providers; How To CIY (Caption It Yourself™); and Guidelines for Captions.

Conclusion

Creating accessible videos isn't simply about following the law. Everyone benefits from accessible videos. Consider the following scenarios:

- learners who need to watch videos late at night but don't want to risk waking up their sleeping children or spouses may use captions.

- people in a noisy environment (e.g., a bus or gym) may rely on captions when they can't hear the audio.
- english language learners may use captions to be understand the content better.
- searchable transcripts can help people efficiently organize and search videos.

Simply said, everyone can benefit from accessible videos. Instructional designers and faculty alike need to know the what, whys, and hows of accessible video.