• Allow students to have direct access to the video so that they can control playback features such as replay, fast-forward, playback speed, and pausing.

• Choose or create videos that are relatively short in duration or are divided into chapters or sections.

• Choose videos that are available with captions or that can be captioned by a provider. Captions are not only useful for those with auditory challenges, but can be useful for many learners, including those learning a new language, those accessing the video in a noisy environment, or those who prefer to read along as they listen.

• To be fully accessible to the greatest range of uses, transcripts should also be provided along with captions. Transcripts provide a text-based version of the content including audio descriptions of visual information and audio content (e.g., laughter, music). Screen reader users often prefer transcripts over listening to the audio content as it is a much faster way to access all of the information presented in the video.

• Student-created video should also be accessible.

• Audio should be of high quality sound and allow for volume adjustment, playback speed variation, and pausing. When recording audio, ensure a moderate, consistent pace and include pauses that make the audio more understandable.

• Audio clips should be relatively short in duration or divided into short chapters or sections.

• Provide alternate ways to convey audio content, such as offering a transcript, image or graphic with description.

• If the goal of instruction is music-related, provide alternatives through tactile and/or visual means if possible. You may also consider adding access to the musical notation or sheet music as an alternative.

• If providing a download link for the audio file, make sure it is in a format that is compatible across devices (e.g. MP3 or MP4).

• When appropriate, provide background information for audio clips to help students understand their significance and situate audio clips in a meaningful context.

• Make sure all images are accessible.

• It is critical to follow copyright and attribution guidelines. Put critical information in the text rather than in image. If you must have text in an image, make sure it is also represented in an accessible way.

• If images are used to represent mathematical equations, make sure those images have long descriptions that describe the mathematical notation explicitly. You may also choose to represent complex math equations in MathML, a specialized mark-up language that describes mathematical notations.
## UDL Connection

### Video

**Provide multiple means of engagement**
Both instructor use of video and student-generated video can recruit and sustain interest for a particular topic and lead to more meaningful participation in the classroom.

**Provide multiple means of action and expression**
Offer students the opportunity to create video as an active way to demonstrate understanding, particularly for those who experience challenges in the area of writing or live presentation.

**Provide multiple means of representation**
Both instructor use of video and student-generated video can recruit and sustain interest for a particular topic and lead to more meaningful participation in the classroom.

### Audio

**Provide multiple means of engagement**
Audio-based materials, such as podcasts, music, speeches, etc., can capture students’ interests and spark rich discussions.

**Provide multiple means of action and expression**
Offer options for students to express their knowledge, such as podcasts, to mitigate communication barriers.

**Provide multiple means of representation**
Audio-based materials can offer students an alternative way of receiving content. For example, a student may use an audiobook version of a text or listen to text-to-speech as she reads a journal article.

### Images

**Provide multiple means of engagement**
Images can improve retention and understanding and they can be used to make text more engaging and relevant.

**Provide multiple means of action and expression**
When assessing students understanding of complex systems and processes, offer the option to have them demonstrate their understanding by creating images, charts, graphs or maps.

**Provide multiple means of representation**
Images can successfully convey complex information, enhance understanding, and improve retention. Images can be used an alternative to text, audio, or video, or they can be used in addition to these other media types.

---

Content from CAST. UDL on campus: Universal design for learning in higher education