Creating Educational Videos
Research-Based Practices & Tutorials

1. **Set yourself up for a high-quality video**
   There are a number of issues that can affect the quality of a video, such as lighting, camera angle, and quality of recording equipment. Adjust the lighting so students can see you clearly. This can be as simple as moving a desk lamp nearby. If using the camera on your laptop, place the laptop on some books or a box so the camera is at eye level. Consider using a USB headset with an attached boom microphone instead of the microphone built into your device. This will help ensure consistent audio levels throughout the recording and will also remove some background noise.

2. **Include yourself in the recording**
   Students engage more with videos that include the instructor on screen as opposed to videos where only the instructor's narration is heard (Guo et al., 2014). Instructor presence also has a positive effect on how students perceive their learning, as students report a lower level of mental effort needed for a difficult topic when an instructor can be seen. In select cases, students' ability to recall information is better when the instructor is present (Wang & Antonenko, 2017).

3. **Limit video length**
   Research supports the common perception that longer videos have trouble keeping students' attention. In a large-scale study of videos watched as part of a collection in open online courses, Guo et al. (2014) found that students engaged more with videos that were less than six minutes in length. In another survey, students thought videos were most effective when kept under 15 minutes (Berg et al., 2014).

4. **Write a script or outline before recording**
   While Guo et al. (2014) recommends that instructors use their natural enthusiasm, a script or outline can help to ensure that you cover all the desired content and can keep you from going off-topic, which leads to longer videos (Mercedes et al., 2016). Additionally, some video streaming services have the ability take the text from a script and automatically convert it into closed captioning. YouTube, for example, calls this feature Auto-sync.

5. **Go beyond the slideshow**
   When making educational videos, instructors often limit themselves to a slideshow presentation. However, several video recording programs will record anything displayed on the screen. Other types of media that can be incorporated into a video include documents, software applications, web sites, images, audio, and video files. An externally connected camera could allow the instructor to record themselves drawing on paper or conducting demonstrations, and a connected tablet or smartphone can mirror its screen to show apps and files directly from the device.

6. **Silence distractions, both physical and virtual**
   Preparing both your physical and electronic environments helps to prevent students from being distracted during the video (Mercedes et al., 2016). In your physical environment, select a location that has low or minimal background noise from elements like air circulation systems, ringing telephones, and other people speaking. On your computer, close all applications that will not be used in the video, disable desktop notifications, and remove icons and distracting backgrounds from your desktop.

7. **Stream the video**
   Streaming the video helps to ensure a faster and smoother playing experience for the students. Without streaming, students need to download the entire video before being able to play it. This can be problematic for students with slower connections or minimal storage space on their device, as video files tend to be fairly large. Several of the most popular streaming services also provide the ability to add closed captioning.

8. **Use closed captioning**
   While the use of closed captioning is commonly required by institutional policy and/or law, it has been shown to have benefits for all students. A study by Dello, Stritto & Linder (2017) showed that, students not reporting a need for accommodations use captions almost as frequently as students with documented needs, with more than 50 percent using captions sometimes or more often; this is only about 10 percentage points less than those with documented accommodations. Students explained that captions help them with focus, retention, and overcoming audio problems.

References

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