



by <u>Stephen Marshall</u> POSTED ON 09-04-2019 Adobe Products in this article

As media consumers we know video is prolific. From social media channels to online classes, streaming entertainment to video chatting, there is little doubt video is profoundly changing how we communicate, entertain, market, and learn. Cisco's Visual Networking Index predicted video would be 80% of global consumer internet traffic by 2019, and organizations rely on video to not only inform the public but also inform internal teams and illustrate ideas. There is no doubt the workforce of the future is based on a digital economy that requires fundamental knowledge of effective video.

As educators teaching traditional or virtual classes, we can prepare students for the modern workforce by incorporating video, regardless of academic discipline. Effective communication transcends any discipline, and most of us will teach using video in very traditional ways. However, there are ways you can bridge the "video knowledge gap" and increase student engagement while delivering your traditional learning outcomes. Any educator can do it! I am excited to share the fundamentals of effective video as well as some unexpected ways of integrating video creation into any course — for any discipline.

¹ "Effective Video Skills are Essential for Digital Fluency | Adobe" 4 Sep. 2019, https://theblog.adobe.com/effective-video-skills-are-essential-for-digital-fluency/. Accessed 26 Sep. 2019.

Effective educational video principles

Anyone using video to communicate should look at the principles of making effective educational videos, whether the goal is to communicate a product, service, or idea. In terms of STEM/STEAM education, understanding the effective components of video is essential.

Cynthia J. Brame, in her article "Effective Educational Videos: Principles and Guidelines for Maximizing Student Learning from Video Content," states, "Video may have particular value for student preparation in biology classes, in part because students may find it more engaging (Stockwell et al., 2015) and because it can be well suited to illuminating the abstract or hard-to-visualize phenomena that are the focus of so many biology classes" (e.g., Dash et al., 2016; see "Video Views and Reviews features in CBE—Life Sciences Education" for other examples). While these effective video principles come from "student learning" principles, they are applicable to anyone hoping to effectively communicate through videos.

The following outline borrows heavily from Brame's excellent piece titled, Effective Education Videos from Vanderbilt University. Foundationally, when designing a video, the creator must consider the following: cognitive load, non-cognitive elements, and features that promote active learning. While there is much theory involved in explaining each of these elements (please refer to the publication), the recommendations from the study suggest four effective practices to incorporate in video: signaling, segmenting, weeding, and matching modality.

Signaling

Signaling uses cues to direct audience attention, and research has found this approach improves both retention and information transfer. Interestingly enough, many social media platforms like Instagram or Snapchat have built the ability to create cues within a video, and we probably often use them without actually realizing they help audiences with focusing on key information or video takeaways.

Suggestion: When storyboarding videos, find opportunities to bring attention to specific parts or "focus" of the video and assign the appropriate graphic overlays or animations as visual cues.

Segmenting

This is the basic chunking of information. This allows users to take "bites" of content and allows for better user control of the content "themes," increasing both information structure and the ability to rewatch hard-to-understand portions of content.

Size of the video segments is important as well, but size is relative to goal, audience, platform (YouTube, LMS, etc.) and potential viewing device (mobile vs. desktop, etc.). In an education setting, a study of MOOC videos found *six minutes or less* kept students engaged.

Suggestion: Storyboard the entire video and decide on how segments best flow together. When possible, segment the entire video into smaller videos to allow for the best user experience with the video content.

Weeding

Weeding involves eliminating any extraneous information that could hinder the learning goal. In my opinion, this can be the most difficult creation task, since it is often the hardest for the creator to separate what is and is not important for the viewer. To the creator, everything can be important!

Suggestion: Identify the key takeaway from each segment, and make sure it is clearly communicated.

Introduce the segment by introducing the point, communicate that point, and summarize the point upon conclusion. The use of guided questions can also increase active learning as it primes the viewer to pay attention.

Match modality

Matching both audio and video to convey information is essential to effective communication. Stay away from "talking head" videos or videos where slides are on the screen for a long period of time. Always find ways to make things "infotaining" and use a conversational style. Khan Academy-style videos match modalities exceptionally well by using a step-by-step approach.

Suggestion: Identify opportunities to match script to video and video to audio. The appropriate use of b-roll or alternative visuals to change up the action of the video can increase engagement. However, be sure these tactics do not contradict the "weeding" work you have already done.

Examples of activating effective video

For educators, there are countless ways to foster the effective use of video in any course for you and your students. This is where Adobe is king, specifically Adobe Premiere Rush, an app for creating and sharing online videos. The app's built-in camera functionality helps students take pro-quality video on their mobile devices. And with simple tools for color, audio, and motion graphics, editing is easy. My students have positive experiences when they use the right tool for the job. Here are just a few examples: Introductory videos: These are videos I now require of all students taking a class 100% online. I have found introductory videos to be a great way to get students in the video creation space while allowing me as the instructor to get to know the student. As part of the requirement, I ask students to think of their video as a "video resume." This forces students to critically evaluate every aspect of the video as if they were using it to get a job. Reflection is essential to enhancing critical thinking, and this approach gives me an opportunity to not only critique the video format but also relate the project directly to workforce development. Syllabus enhancement videos: Every semester, for every class, I use video to quickly explain the class syllabus as well as any large project requirement — creating a historical record of my expectations. Students have commented how much they appreciate referencing the video, especially as the term progresses, and I have found the video makes it impossible for a student to say they "didn't hear it in class" or they "didn't understand my expectations."

Video as a project component: When applicable, I assign students a "video presentation component" as part of the final project. Not only must the video adhere to the fundamentals expressed earlier, but it must communicate the main theme of the project. These are often "how-to" videos, which help not only increase their video skills but the process of breaking concepts into segments critically enhances learning. Students can also share their videos to YouTube, Facebook, and Instagram right from the Adobe Premiere Rush app.

This approach really creates opportunities for peer learning and team collaboration, essential elements that require confidence in today's working world.

Deep explanation videos: I will often make videos for students to explain concepts that might be difficult to grasp in a live or virtual lecture. This allows students to re-\watch segments for deeper understanding and the content is often evergreen, meaning it can be used over again in future terms.

Anyone can create videos – that means YOU!

I firmly believe anyone can create effective video while teaching students, of any discipline, how to do the same. The workforce of today, driven by our digital economy, requires students to communicate effectively as well as to critically understand the creation and consumption of video content. As with anything new, students (and faculty) will be uncomfortable creating video, but I have found their confidence increases exponentially. I have also found requiring these types of videos facilitates powerful peer learning, critical thinking, problem-solving, and ultimately contributes to the confidence students require to enter today's work environment. All these great benefits happen for students while keeping faculty relevant in our heavy video-centric world.

To explore more ideas for incorporating video into the curriculum, visit our <u>digital literacy</u> blog.