Teaching Tips

A Forum for discussion and tips for advancing teaching and learning at Mona

Using Videos in Your Teaching

Videos are being used increasingly in the face-to-face, blended and online university classroom. They are an important component of our pedagogical practice these days. Students are also using videos for studying and learning outside classrooms. There is available research that supports the potential of videos to advance learning, however, it is not automatic. Much effort will need to be expended to design the video appropriately, making the right pedagogical choices in order for it to be most effective and then integrate it suitably into the course. In cases where videos are selected from those already available, there is need for considerable care to be taken to make the appropriate selection and then use it properly to ensure maximum benefits are realised.

The video has multiple uses in terms of teaching and learning. Videos are used to capture the lecture and this can become a pretty versatile teaching and learning resource for the busy student who can listen and watch it later on or in parts. Furthermore, it is possible to design videos for the presentation of case studies, interviews, digital storytelling, student directed projects and so much more.

It must be borne in mind that the use of technology by itself will not advance or transform learning. For these goals to be realised, the lesson must be given considerable thought especially the learning activities that students are asked to do in order to understand the concepts and demonstrate mastery. Learning is advanced and students are motivated when lessons using digital video are appropriately designed.

Basic Questions Before Designing a Video

There are some basic questions that you should ask yourself before designing a video. These are some of the important questions:

- Are the learning objectives/learning outcomes stated in ways that will enable a video to help them to be realised?

- What aspects or areas of the course will this video address in most effective ways?

- Where in this course is the best place to use a video to advance learning?

- Is it the best media for this particular topic or aspect of the course?

- Does this component of the course require interactivity? Can a video cause the level of interaction that is needed in this section of the course?

- Do I need to have a discussion/discussions with the students and will this be better done using classroom discussion, online discussion, webconferencing, Google Hangout etc.?

- What are the likely benefits to accrue if a video or videos are used in this course?

- Are there risks or deficits associated with the use of the video?

- How will I motivate/encourage students to actually watch the video?

- What approaches will I employ to get students to think deeply about the content conveyed in the video to ensure that they are processing the content?

- Are there follow-up questions that will ensure that the students have understood the information disseminated throughout the video?

Designing for Maximum Pedagogic Effect

When the video is designed for the maximum pedagogic effect, the following are likely to occur:

♦ Gain students attention

♦ Motivate students to learn

♦ Spark curiosity

♦ Add value to course content

♦ Enable real life examples to be seen in class leading to an enriched classroom discussion

♦ Stimulate more focused discussions

♦ Promote deeper investigations of the course content

♦ Enliven case studies used to provide course information leading to greater engagement

♦ Use as an archived resources for learning

♦ Access anywhere, anytime and might be watched, paused and watched again

♦ Provide multiple viewpoints of the same material leading to enrich understanding of course content

♦ Serve as a reflective tool for learners to think about what they are learning and how they are progressing

♦ Use to provide instructional material for the class and enable the use of the flipped classroom approach

♦ Help students with prior knowledge to process the content more easily and more meaningfully.

Principles that Inform the Choice of Video or the Designing of a Video

Some principles allowing instructors to develop videos are proposed by Cynthia Brame (2016). She also offer suggestions on the approaches that students might use to learn the content, enabling desired learning outcomes to be realized. She looks at three principles that we should bear in mind. These are:

1. Cognitive Load

2. Student Engagement

3. Active Learning
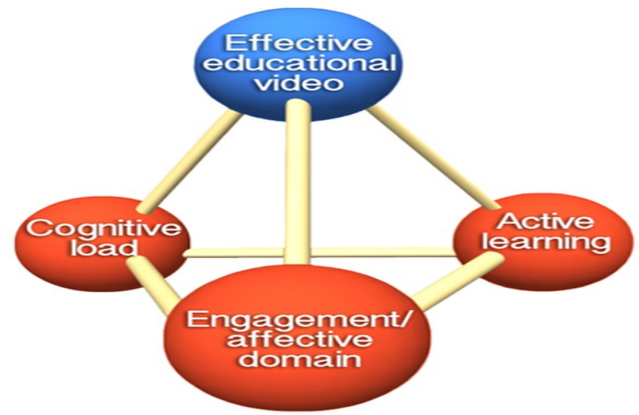
By cognitive load she means those selections that students will make based on their importance or relevance. These are transferred to working memory later on. Selections are also made based on germane load, that is the level of cognitive activity required or how much work is required to understand the content. Further, what each learner decides to place in working memory can be influenced by extraneous load, those things that get in the way of learning. In designing the video, the goal is to minimize extraneous cognitive load and optimize germane load. In this regard, the video ought to be designed with resources that help the learner to keep track of what is important.

Students are more likely to watch shorter videos, those using conversational style and the ones that are delivered with enthusiasm. These are usually most engaging. Based on the research, in order to gain and hold students interest, videos must be short and certainly they need to be delivered with enthusiasm (Brame, 2016).

For most students, the mere act of watching a video is really to become involved in a passive activity, unless there were unique design features promoting involvement or active learning. It is possible to add questions within the video that will cause it to be an active learning resource. The research is showing that students who watch videos where questions are inserted do better on exams than those who watched videos without the questions. Guiding questions that call on students to think deeply and meaningfully about course content as they watch the video are also helpful and where these are made available, the research is showing that students do better on exams. Developing videos leveraging interactivity is also recommended. This has been shown to advance student learning since such videos cause greater levels of engagement or mental activity etc. These videos should be developed in ways that enable students to pause the video, move back to something they didn't fully understand, watch it again or review various parts of the video to gain a fuller understanding of the content. Of course, it helps if the videos are available for the student to upload to their mobile devices. Hence, portability is an asset.

Reference

Brame, C. J. (2016). Effective educational videos: Principles and guidelines for maximizing student learning from video content. *Cell Biology Education-Life Sciences Education,* 15(4), 1-6.