

Didactic use of video



from watching to learning

The use of video can be of great added value to a course. To optimise the added value, it's worthwhile to consider a few things before you start recording your own video, or start searching for a suitable existing one.

Xck b`cUX 'ZUVVg\YYh '\thdg.##cb`]bY`YUfb]b[\I V"H XY`Zfb`: 57HG< 99H



Make sure there's a clear reason you're using video in your course

For example:

- · To convey information in an online course
- To add a personal touch in an online course, example: The Sofa
- To free up time during course meetings (in a flipped classroom setting)
- · To show things that are otherwise difficult to show
- To cater for different needs of students
- To increase variety in teaching methods

2 Think about the different purposes a video can serve

Here is an overview of possibilities, using the Nine Events of Instruction by Robert Gagné.

1. Gain attention and create interest in the topic.

video example: Wandering Mind



2. Inform learners of objectives.

video example: Solar energy



3. Stimulate recall of prior learning.

video example: World War II in 7 minutes



4. A TU Delft teacher uses a video of <u>a Mexican</u> Wave in a stadium to explain mechanical waves.







4 Present the content (knowledge clips)

• Theoretical knowledge

video example: What is vertigo?



Examples

video example: Blind cave fish



· Rules and procedures

video example: Synthetic Biology



Heuristics

video example: How to make a city great



5 Provide learning guidance.

video example: <u>How to read a scholarly journal article</u>



6 Elicit performance / practice.

video example: Balloon Challenge



7 Provide feedback.

video example: Feedback on an argumentation exam



8 Assess performance

9 Enhance retention and transfer to the job.

video example: Using tables and graphs in the real world







3

Make watching the videos worthwhile and attractive for your students

- Make sure the videos are an integral part of the course.
- Write an introduction for each video and explain how and why videos are part of the course.
- Make it clear to students when they are required to watch which video.
- Make sure the video is easily accessible and will play on any digital device.
- Make sure the context and purpose of each video is clear to the students.



4

Add assignments to your videos

The best way to change your students' experience from watching your video into learning from your video, is to add an assignment to it. You can ask questions about the video, have students reflect on it, evaluate its content, take a stand on the topic, come up with their own example, etc.

You can give the instruction outside the video, e.g. written out in Brightspace, or you can explain them in the video itself. There are also numerous other tools available with which you can easily add questions to your video, such as EDpuzzle, Playposit or Zaption.

You can use the Brightspace quiz or discussion forum for assignments.







5

Research based tips for making videos that will engage your students:

FINDING	RECOMMENDATION
Shorter videos are much more engaging.	Invest heavily in pre-production lesson planning to segment videos into chunks shorter than 6 minutes.
Videos that intersperse an instructor's talking head with slides are more engaging than slides alone.	Invest in post-production editing to display the instructor's head at opportune times in the video.
Videos produced with a more personal feel could be more engaging than high-fidelity studio recordings.	Try filming in an informal setting: it might not be necessary to invest in big-budget studio productions.
Khan-style tablet drawing tutorials are more engaging than PowerPoint slides or code screencasts.	Introduce motion and continuous visual flow into tutorials, along with extemporaneous speaking.
Even high quality pre-recorded classroom lectures are not as engaging when chopped up for a MOOC.	If instructors insist on recording classroom lectures, they should still plan with the MOOC format in mind.
Videos where instructors speak fairly fast and with high enthusiasm are more engaging.	Coach instructors to bring out their enthusiasm and reassure that they do not need to purposely slow down.
Students engage differently with lecture and tutorial videos.	For lectures, focus more on the first-watch experience; for tutorials, add support for rewatching and skimming.

Need help? Contact online-learning@tudelft.nl



