

# Teaching with Video – Student Engagement & Learning

by

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## 1 MINUTE: SUMMARY

### Multimedia (Video) Is pedagogical

- engages
- informs
- challenges

### Barriers to Create/Manage/Deploy

- Hard to create video snips (client video editor programs; codecs, file formats,...);
- Hard to manage video libraries
- Hard to deploy (hard to integrate w/PPT, due to formats, codecs)

### EZSnips is a product of pain

- built to overcome barriers
- online only, browser-based service
- fosters collaboration, creative pedagogy

## 2 MINUTE: EXAMPLES

### Video examples

- engages: volcano eruption  
[http://ezsnips.com/Ro2xZT\\_9l0d7z](http://ezsnips.com/Ro2xZT_9l0d7z)
- informs: quicksand and rescue  
<http://ezsnips.com/eVnB654EBvbR5>
- challenges: solid or liquid?  
<http://ezsnips.com/oFDNpg9xmwiho>

## WHAT RESEARCH JUSTIFIES THE VALUE OF MULTIMEDIA LEARNING?

Cognitive theories of learning and research findings inform education<sup>1</sup>

- Separate visual & auditory input channels, can be overloaded
- Channel understanding informs science of multimedia learning

<sup>1</sup> Clark, R. C. and R. E. Mayer. 2011. E-Learning and the Science of Instruction. 3<sup>rd</sup> Edition. Pfeiffer

## WHAT ARE SOURCES OF VIDEO SNIPS?

YouTube.com is the largest public video archive in the world. Although most video content posted there was not created specifically for the instructional environment, there is much video with pedagogic value for almost any subject.

## HOW ARE EZSNIPS CREATED?

- Instructor finds on YouTube a video with a segment of interest; determines the beginning and ending times for the relevant segment of interest.
- **www.ezsnips.com** services are used to create a web link that plays the video snip.

## HOW ARE EZSNIPS LINKS USED?

- The **EZSnips** web link may be attached as a hyperlink to a PowerPoint slide, or clicked from any other web-compatible program.
- When clicked, the **EZSnips** link will play exactly that video segment of interest in a web browser window.

## WHAT VALUE DOES EZSNIPS ADD?

The EZsnips service

- plays the video snip in a window without most of the distracting information determined by YouTube
- enables the tagging and organizing of video snips with arbitrary topics, keywords and phrases, and powerful sort/filter/search functions for retrieving video snips
- enables collaboration among instructors who want to share video snip libraries

## HOW IS CLASSROOM INSTRUCTION MODIFIED TO ACCOMMODATE VIDEO INSTRUCTION?

The instructor replaces some traditional lecture minutes with a video tutorial, during which students

- watch the video snip (1-3 minutes)
- discuss questions in small groups
- analyze, evaluate, and write observations, arguments, conclusions.

Instructor then leads discussion about observational evidence, scientific argument, etc. to guide and enhance student understanding.

## EXAMPLES OF VIDEO TUTORIALS

See example tutorials for an introductory earth science class. Similar tutorials could be created for other subjects.

## WHAT ARE SOME EXAMPLES OF VIDEO CHANNELS ON YOUTUBE?

- Governments (US, Canada, Norway...)
- US Government agencies (Library of Congress, Dept. of State, IRS, Bureau of Labor Statistics, NOAA, NASA, Geological Survey, Army Corps of Engineers,...)
- News channels (CNN, BBC, many)
- Museums (American Museum of Natural History, Auckland Museum,...)
- Businesses and Corporations (Alabama Power, Chevron, Harvard Business Review, Stanford Graduate School of Business, Wall Street Journal...)
- Scientific Organizations (AAAS, Carnegie Institution, German Aerospace Center, Royal Society of London...)
- Universities and research labs (Berkeley, Chicago, Arizona State, +many more...)

## CAN I PLAY YOUTUBE VIDEOS FOR EDUCATIONAL PURPOSES?

Of course. YouTube has even created a special website for access to what it classifies as “educational videos”.

YouTube videos are posted for public, unlisted, or private access. If the producer doesn't want you to be able to view the video, you wouldn't be able to access it.

## WHAT ABOUT VIDEO COPYRIGHT AND FAIR USE ISSUES?

YouTube publishes extensive copyright information on its website. See this page for more detail.

- <http://www.youtube.com/yt/copyright/>

Much information and discussion on copyright and fair use is available on the web. For a start, see these pages

- <http://www.edutopia.org/blog/film-festival-copyright-fair-use>
- <http://www.cmsimpact.org/fair-use>
- <http://uri.libguides.com/content.php?pid=462752&sid=3788188>

## WHERE ARE SOME RESOURCES FOR YOUTUBE AND EZSNIPS?

- Using YouTube <http://goo.gl/wbrcG>
- YouTube search tips & tricks <http://goo.gl/Pu4rO>
- YouTube shortcut keys (very helpful) <http://goo.gl/nAJRn>
- Video Intro to EZSnips <http://goo.gl/VrhUH>
- Example Video Tutorial <http://goo.gl/BBmFb>