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Creating educational videos : lessons learned from MOOCs

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UNIGE's MOOC Unit

Provide guidance for project definition

Support teams in course creation (workshops, teaching resources)

Coordinate course design and production

Supply technical production support for audiovisual content & on MOOC platform

Act as central point of contact between teams and other university services / platform

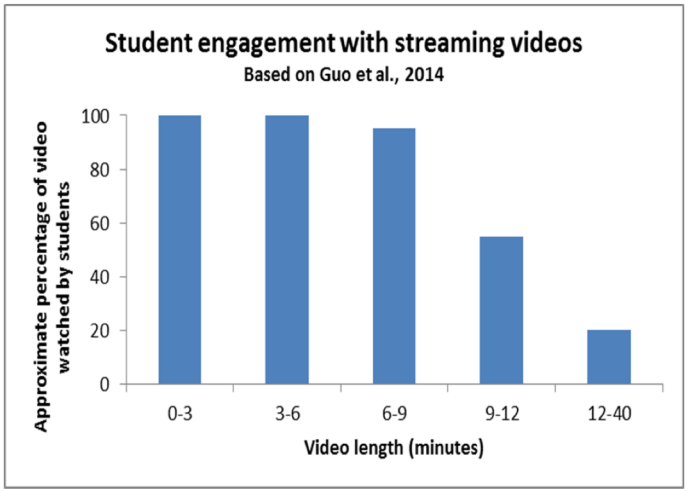
Set up course evaluations to improve content and share best practices

→ Support teams in course creation

- Today, video is an important part of higher education, particularly in online learning

- 3 things to consider to create effective educational videos (Brame, 2016) :
  - Maximize student engagement
  - Manage cognitive load
  - Promote active learning

Maximize student engagement (Guo et al., 2014)



- Keep it short!
  - Student engagement tend to drop off after 9 minutes
  - If you have a lot of content on the same topic, try segmenting your video into several shorter videos.

Maximize student engagement (I)

- Developping a sense of social partnership leads to a greater engagement:
  - Address the learner directly through the camera, using the pronoun "you" or "we”
  - Avoid chopping up videotaped lectures that had been presented in a face-to-face class
  - Address the learner as if you were talking to a real person, maintaining eye contact as much as possible
- Use a conversational style :
  - Avoid using scientific jargon when you don't have to. If you have to use complex terms, always remember to explain them.
- Use your voice to convey your message :
  - Learn to vary the tone and speed of your verbal flow. Example : Speed up to show your enthusiasm, or slow down for parts that are more complex to understand.

Maximize student engagement (II)

- Do not be afraid to use “pauses” in your speech:
  - They act as punctuation and help your audience understand you;
  - They control the overall pace of your delivery:
    - For a period or comma, count up to 2
    - For a comma, count up to 1
    - For a semicolon, count up to 1
    - For a colon, count up to 2
    - Between the end of one paragraph and the beginning of the next, count up to 3.
  - They help engage your audience by giving time to reflect on your words,
  - They help convey emotions. If used correctly they can convey happiness, sadness, excitement, etc.

The write touch (retrieved June 23)
https://writetouch.ca/speechwriting/pausing-for-effect-seven-reasons-pauses-enhance-your-speeches-and-presentations-and-eight-ways-to-ace-them/

Manage cognitive load in videos

Cognitive load refers to
how much mental effort and capacity it takes for someone
to learn or understand something

(Mayer and Moreno, 2003)

Manage cognitive load in videos

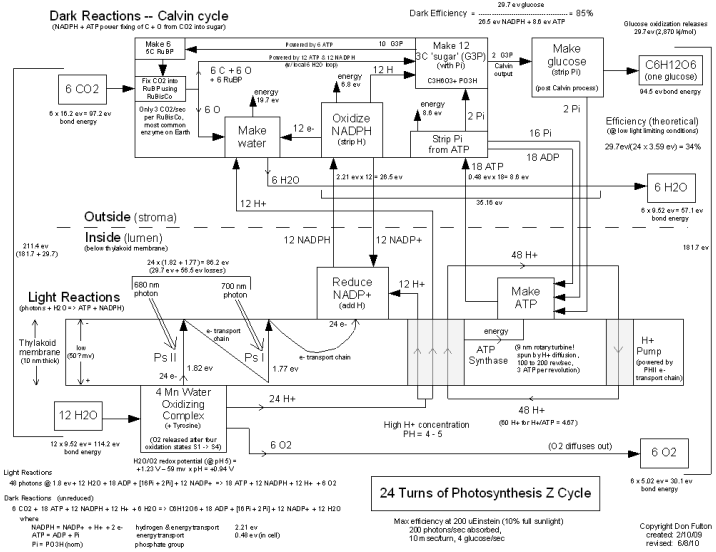
- (1) Use signaling to highlight important information.

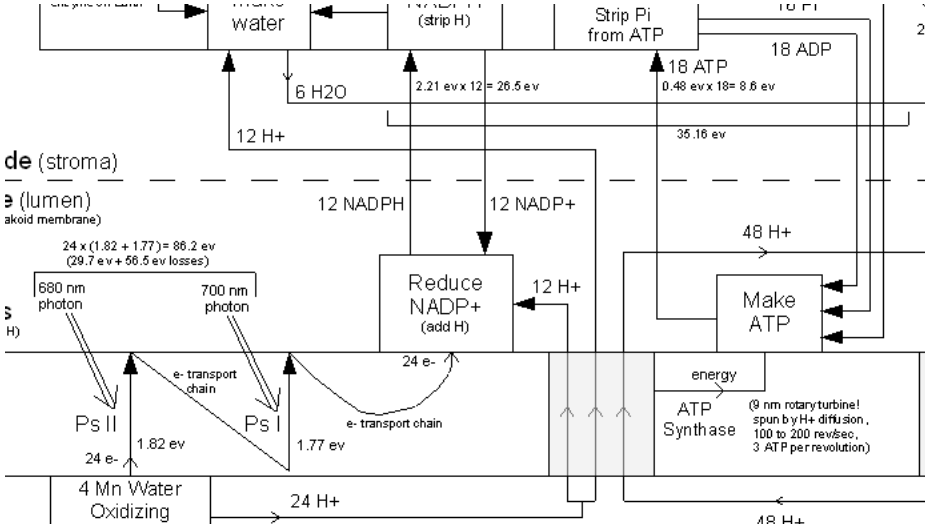
Keywords

Visual cues (arrows, change in color/contrast)

Zoom in

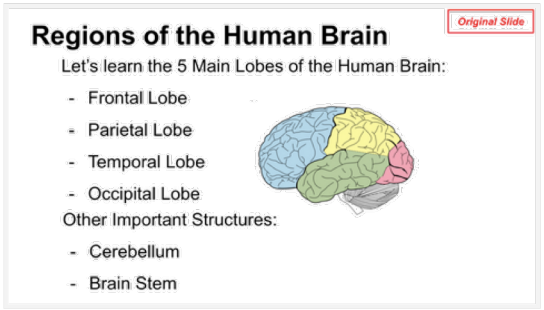
Example of highlighting (Zoom in)

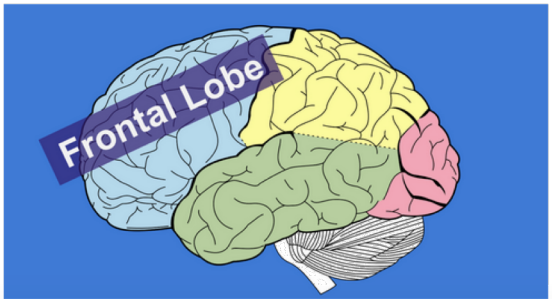


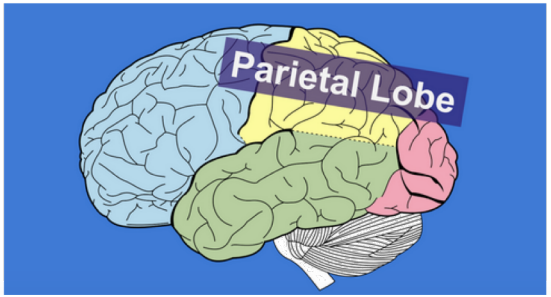


Manage cognitive load in videos

- (2) Use segmenting to chunk information







Manage cognitive load in videos

- (3) Eliminate extraneous information or distractors
  - Music (unless it's the subject of study)
  - Images "just for decoration", with no direct link to the subject matter
  - Superfluous textual information

Promote active learning

Active learning will help students process information and enable self-assessment of their comprehension:

- Use guiding questions before asking students to watch videos;
- Integrate questions into the video;
- Avoid stringing too many videos together (remember, we want to keep videos short!):
  - Put learning activities (example: small quiz, reflexive prompt, journal entry, minute paper, etc.) between videos

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Thank you!

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