

Easy production educational videos (EPE)

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EPE videos can be defined as a pedagogical video clips produced by the use of “low-effort” video equipment (Kolas et al. 2014).

Based on a pilot project carried out in 2013, the Department of Physics at ETH Zurich now has provided equipment and space, where lecturers can produce tutorial videos in high quality at their own pace. Following a short introduction to the technical setup and some basic concepts on multimedia teaching, the lecturers can record their videos without assistance. A WolfVision desktop visualizer in combination with the Camtasia software package is the major component of the setting.

The production is limited to the “Writing Hand” format, which we consider being most efficient for our learning objectives. While the recording time is reduced to a bare minimum, lecturers can focus on content and on pedagogical design. This approach turns out to be attractive, as more lecturers are using the equipment and consequently gaining expertise in video design. Moreover, the resulting videos are highly appreciated by students, who confirm that this new tool supports their learning performance.

YouTube-Channel: *eduphys* (search for “eduphys” in Youtube)

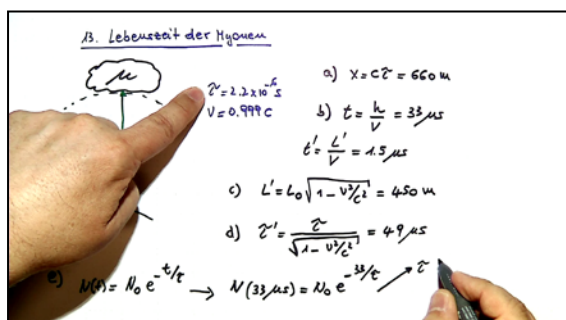
Aim: Build up expertise in video production among lecturers and test the impact of educational videos

- **problem-based videos (worked solution)**
research suggests that problem-based videos using dynamic visualizations are considered helpful with significant learning gains (Kay&Kletschin 2012)
- **paper drawn videos**
Hand-drawing tutorials are more engaging than PowerPoint slides (Guo et al. 2014)
- **local facilities with a self-service recording setting**
effort should be invested in the content rather than in production and editing (Loviscach 2014)



How it works:

- short introduction (pedagogical issues / technical possibilities / working process)
- recording without assistance (self-service)
- postproduction & upload done by a student assistant (upon request)

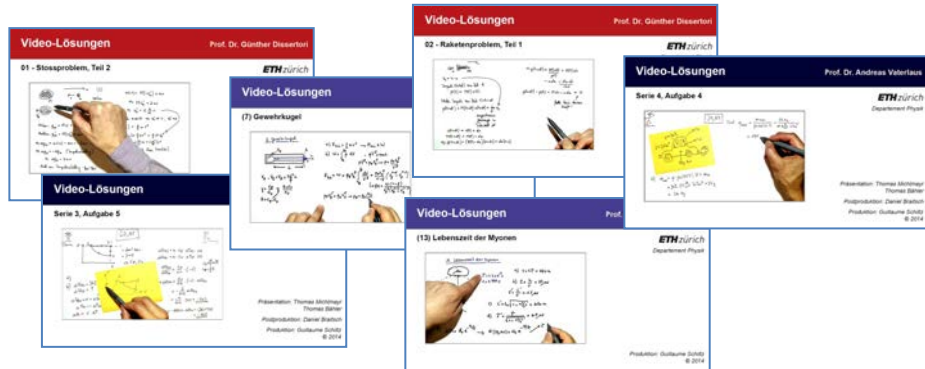


Fact sheet

113 videos

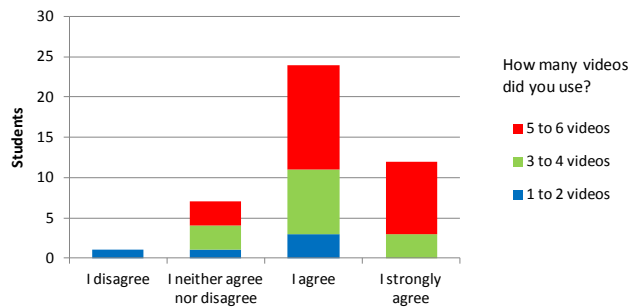
6 lectures

15'419 views

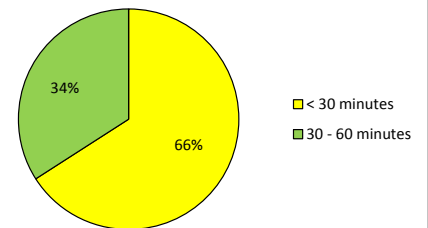


Students' feedback

The videos helped me to understand the lecture content.

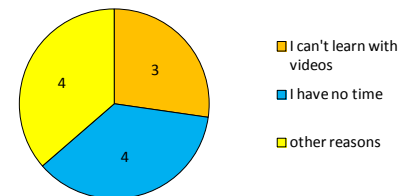


How much time did you spend on each video?



N=44

Why don't you use the videos?



N=11

- physics lecture supplemented with 6 videos
- 55 students participated in the survey
- 44 students used the videos
- 11 students did not use the videos