

EFFECTS OF INSTRUCTIONAL VIDEOS ON STUDENTS LEARNING

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The advantages of flipping the classroom are widely depicted in literature (e.g. Bergmann, J., & Sams, A., 2012). However, the widely used element in video instruction, overlaying of a small video of the instructor over lecture slides, is understudied. Kizilcec, et al. (2014) found that students strongly preferred instruction with the face and perceived it as more education. It was found that “including the face in video instruction is encouraged based on learners' positive affective response”.

A new technology called Learning Glass, which can be used for recording lectures that allows instructors to write lecture notes while maintaining face-to-face contact with students, was used to record instructional videos for a compulsory modelling course aimed at first year science students. Unlike traditional classrooms where the instructor's back is to the students while writing on a whiteboard, the Learning Glass allows for a more engaged, natural, relaxed, and interactive viewing experience. The instructor is recorded forward facing which allows for natural eye contact with the camera/students, gesturing and demonstrating what has been written on the glass.

With the help of Learning Glass, the effect of the presence of instructors in instructional videos for university students in two metropolitan universities was studied. All students performed the same pre-test which showed their knowledge before watching any video. After the pre-test, they were randomly divided into two groups: with and without the presence of instructor. Students were required to do the same test afterwards and their learning performance was measured by two-way ANOVA.

It was found that there was no significant difference between the two groups. One possible reason is that individual learning style is more important than instructing all learners with one style (Dunn & Griggs, 2000). Other explanations will also be explored. Results of this study may help us recognize the implication of the presence of instructor in videos as well as provide a better learning environment in the future.

References

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