

Student Engagement with Online Learning

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One of the many impacts of Covid-19 on Higher Education in the UK was for teaching to be moved online and greater use of pre-recorded video content was made. Modules that moved to the use of pre-recorded video in place of lectures have essentially adopted a flipped classroom approach. The flipped classroom approach is when instructional content, such as pre-recorded video, is delivered prior to interactive seminars. Seminars then focus on active learning. Many papers consider the positives and negatives of making a move to a flipped classroom approach – see Akçayir and Akçayir (2018) for a recent review of the literature. Pre-recorded video also has another advantage over lectures as it allows for detailed monitoring of student engagement including data on the amount of views and the length of those views. In this paper, we make use of these statistics to consider how differences in the delivery of the online content can affect engagement with pre-recorded videos. As the time and date of viewing is also recorded then it is possible to observe how module events (e.g. seminars and formative assessment) impact engagement with the pre-recorded videos. Importantly this helps to generate a better understanding of which incentives students respond to and how students use pre-recorded content. As two of the three modules in the analysis took place before the pandemic then the paper can also look into whether the pandemic has an impact on student engagement.

The pervading wisdom is that ‘shorter’ videos foster better engagement from students. There is a lack of precision on what is meant by ‘shorter’ and a lack of convincing evidence about the impact that ‘shorter’ video lengths have on engagement and learning particularly in Higher Education. Slemmons et al (2018) considers the experimental evidence of the impact of shorter videos at the K-12 level in the USA where ‘shorter’ means two ten-minute videos instead of one twenty-minute video. They do find some evidence that the shorter videos are associated with better longer-term retention of information for males and students with learning disabilities. Students in the study also self-reported that they were more engaged. However, the situation in higher education is more complex with weekly module delivery options potentially ranging from anywhere between a single fifty-minute video to ten five-minute videos. Whilst shorter videos might initially increase engagement, it is an open question whether this engagement persists to include the ninth or tenth video.

The paper will compare patterns of engagement with online video across three modules: (Module 1a) a pre-pandemic postgraduate module with long videos; (Module 1b) a pre-pandemic PG module with short videos; and (Module 2) a post-pandemic undergraduate module. Modules 1a and 1b are the same module run in different years with Module 1a representing a ‘refinement’ of Module 1b. Module 1a had 41 videos with an average of eight minutes per video and a total video run time of five hours and thirty minutes. Module 1b had 67 videos with an average of five minutes per video and a total video run time of five hours

and forty-five minutes. As both modules had a very similar total video time, a comparison of Modules 1a and 1b will shine some light on whether students are indeed more likely to watch shorter videos and whether this persists when there are more videos.

The addition of Module 2 into the analysis adds another dimension for comparison, which allows the paper to compare the patterns of engagement before the pandemic, when only limited modules made use of online resources, and during the pandemic, when the majority of modules were online. The magnitude of the change in delivery of modules could have big impacts on how students engage with pre-recorded video and it is important to consider this as we plan for future delivery.

The data from all three modules allow further consideration on how students use videos in relation to specific module events and allows the paper to consider the following questions: Do students increase viewing of videos before seminars? Does a formative assessment element increase engagement with videos? Do students revise the material during holidays or before an assessment? All of which are vital questions so that student use of video can be further understood and appropriate plans can be put in place for 2021/22 and beyond.