

Videos: not just for the flipped classroom

Fiserova Jana, *Staffordshire University, UK*

Literature demonstrates that there are clear benefits to using videos and the flipped classroom model. However, as higher education is more competitive and customer satisfaction driven than ever before, it is worth investigating whether students would appreciate and engage with such a model before implementing it into teaching. Therefore the aim of this pilot research is to investigate whether students have a preference in the way vodcasts (video-podcasts) could be used and whether they find them suitable for teaching at university at all. Student access to technology is also explored together with their preferred length and format of video-podcasts.

The data has been collected using a questionnaire on a convenience sample of 32 second-year Business School students from across three awards (Business Management - 14, Events - 13, and Accountancy and Finance – 5). There were 20 women and 12 men in the sample whose median age was 22 (mean=26, std. dev.=8).

There is evidence which suggests that class attendance 'is far superior to getting lecture notes from a friend or even from the professor' (Kiewra, 1985; McKinney et al, 2009; p.618). But what if students are provided with an audio/video recording? Are the scales still tipped towards in-class note taking then? The findings of McKinney et al (2009) quasi-experiment indicated that students in the *podcast condition* who took notes while listening to the podcast scored significantly higher in their assessment than the *lecture condition* participants. Does this mean that academics can be replaced by podcasts?

My findings suggest that students value the opportunity to interact with tutors (94%) and peers (91%) or ask questions (84%) during face-to-face lectures which is currently not possible through the use of lecture podcasts. This can perhaps also explain why only 16% of students said that they would prefer for a video to replace a physical lecture, in a way that they would not attend lectures but the time they spend at university would be used for small group discussion and problem solving using tutor guidance and peer support (i.e. flipped class model cf. Strayer, 2012; Tucker, 2012). A third of respondents liked the idea of having a recording of a physical lecture available to them, while almost half would appreciate videos being used occasionally for extra support with difficult material.

As with any approach, there are potential drawbacks of implementing the flipped classroom model; one of them might be access (or lack of it) to technology. Frydenberg (2012) suggests that not all students have access to the same technology such as smart phones or laptops, especially at home, and points out that there could be a digital divide against the flipped classroom methodology. My research however shows that all students had access to a PC either at home (81%) or at University (19%), 66% of the sample owned either tablet or iPad, and over 90% had their own laptops and smart phones.

Abate (2013) evaluated the effectiveness of academic podcasts in promoting knowledge retention and application. 35 female undergraduate nursing students were randomized into three groups: a traditional face-to-face lecture group, an unsegmented (non-stop) podcast lecture group, and a segmented podcast lecture group. She concluded that students in the segmented podcast lecture

group demonstrated higher¹ scores on assessments than those in the other two groups. My research reports on preferences of the format of videos and the findings demonstrate that students indeed find segmented videos preferable to entire lecture recordings. Nearly 94% preferred the recording to be either split into meaningful sections by topic (68%) or by time into smaller chunks (26%). Three quarters of the sample would like the videos to be between 5 and 20 minutes long (5-10mins - 31%; 10-20 minutes - 44%).

Evans (2008) surveyed 200 first year Business and Management students to investigate effectiveness of using podcast as a revision tool. They conclude that the use of podcasts as a revision tool has clear benefits in terms of the time students take to revise and how much they feel they can learn. Almost half my sample believe that videos would be useful all the time or when a difficult topic is being covered while approximately a third think that they would find them useful during revision only or if they missed a class. Nobody responded that they would 'never find videos useful'.

Coupled with the advantages of flexibility in when, where and how it is used², podcasting/vodcasting appears to have significant potential as an innovative learning tool for adult learners in higher education. Only four students in my sample did not agree with the statement that use of videos was appropriate for teaching at university. Students were asked to explain and justify their answers. Those who disagreed with the statement expressed their concern that they are 'paying for a physical learning experience, not something [they] can all do in [their] own home' and that videos 'are lazy and discourage interaction'. Those who agreed that videos were suitable to HE supported their choice by appreciating 'no disruptions from unruly students' if a class is flipped and the possibility of 'go[ing] over the key lecture points again [as] sometimes it is difficult to absorb all content delivered in one session'.

Students generally find the use of videos appropriate to support teaching at university by providing recordings of lectures available in addition to a standard 'physical' lecture or occasionally to provide support with difficult material. Students did not seem in favour of the flipped classroom model as only five selected it as the preferred way of using videos. The possibility of using one's own device to watch videos multiple times, anytime and anywhere have been identified as advantageous while inability to ask questions and no interaction with tutor or peers have been identified as being a disadvantage of using videos in teaching. There does not seem to be a problem with student access to technology that can be used to facilitate the use of videos. Students do not seem to mind whether the videos are supplied as a screen recording with a voice-over, or a traditional lecture format with a lecturer appearing in the video, or audio-podcast with PowerPoint slides. Students however expressed preference in terms of length and timing format. Results tend to suggest that recording entire lectures that last more than 20 minutes would not be appreciated by students while splitting a lecture into meaningful smaller chunks of 5-20mins by topic would be preferred. N.B. None of the independent variables³ seem to have an effect on any of the dependent variables examined.

1 though the results were not statistically significant; $\chi^2 = 4.202$, $df = 2$, $p = .122$

2 90% of respondents thought that having the possibility to watch anytime, anywhere and multiple times is an advantage of the use of videos

3 age, award or gender

References

Abate, K. S. (2013) The Effect of Podcast Lectures on Nursing Students' Knowledge Retention and Application. *Nursing Education Perspectives*, 34(3), pp.182-5.

Evans, C. (2008) The effectiveness of m-learning in the form of podcast revision lectures in higher education. *Computers and education*. 50(2), pp.491 - 498.

Frydenberg, M. (2012) *The Flipped Classroom: It's Got to Be Done Right*. [online] available at www.huffingtonpost.com

Kiewra, K. A. (1985) Learning from a lecture: An investigation of notetaking, review and attendance at a lecture. *Human Learning*, 4, pp.73–77.

McKinney, D., Dyck, J. L., and Luber, E. S. (2009) iTunes University and the classroom: Can podcasts replace Professors? *Computers and education*. 52(3), pp.617 - 623.

Strayer, J. F. (2010) How Learning in an Inverted Classroom Influences Cooperation, Innovation, and Task Orientation, *Learning Environment Research*, 15(2), October, pp. 171-193.

Tucker, B. (2012) *The Flipped Classroom*. [online] available at <http://educationnext.org/theflipped-classroom/>