Open education videos in the classroom: exploring the opportunities and barriers to the use of YouTube in teaching introductory sociology

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The use of open education resources has become more commonplace in classroom teaching and this has been an observable and growing trend. The accessibility of the same materials further reinforces the change in roles of the teacher, from gatekeeper of knowledge to learning facilitator. Our research question is that if a student has free and easy access to the same materials that are being used to teach them in class, how does this affect their perceptions when they are presented with this material in the classroom environment? What are their perceptions regarding the perceived value for money, efficacy and authority of the material?

This research specifically investigated the use of open education videos in the classroom environment and their incorporation into an associated space in the virtual learning environment. The research questions of this investigation surrounded the practical, technical and pedagogical issues that arise from the incorporation of these resources within class and online course materials as well as exploring student perceptions about the use of this material in the class and online.

Keywords: YouTube; online video; open educational resources

Introduction

This project is a case study of the use of YouTube videos in learning and teaching in a 10 week introductory sociology course at the Foundation Centre at Durham University, which prepares mature and international students for their undergraduate degree. This course was taught across two campuses to three classes of students a week, with 75 students in total. The foundation year at Durham teaches a range of subjects to its students, with specific courses relating to the degree programme for which they are registered. The nature of the Centre means that there is a diverse student body in terms of age, nationality and subject specialism. This has an impact on the design of the course, which is intended to be a stimulating introduction to a wide variety of sociological topics such as class, gender, crime and media.

During this programme, online education videos were integrated into the classroom practice of the lecturer. In addition to this a YouTube playlist (Pearce 2011) was established and made available to students in the associated online environment. The research questions are focussed on evaluating student perceptions of this teaching approach and investigating independent use of the created playlist.

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Videos were used to illustrate topics and followed by further explanation and discussion, both class-wide and smaller group.

Literature review

Since 2005 YouTube has emerged as a major host of online video content and is now the third most popular website behind Google and Facebook (Alexa 2011). The site hosts an enormous range of material and is popular for sports clips and music videos but has also been used within higher education as a way to communicate with current and potential students and disseminate research and teaching-based material (Wilkes, Pearce, and Barker 2011). As of September 2009 there were 102 university YouTube channels in the UK, and at the time of writing this report over 400 university channels worldwide (Azyan 2011). There is a creative tension within YouTube as a platform for mainstream broadcasters (maybe even including universities) and as a community of individual content creators who see the site as a social network (Moran et al 2011). This has resulted in a wide range of content and uses/users which has been widely studied in the social sciences (Burgess and Green 2009; Lange 2007; Snickars and Vonderau 2009; Wesch 2008).

The site offers a wealth of multimedia content that could be used for sociology teaching. This will include material specifically developed with sociology in mind such as interviews with leading theorists and teacher-created content, as well as more general content that may be useful in illustrating key concepts and theories.

Talking about technology more generally, Weigel argues that it has the potential to improve both the quality and access ('richness' and 'reach') of teaching, that is the level of engagement with learners and the numbers of learners engaged. In practice institutions tend to focus on the reach potential of the internet (Weigel 2002; Wilkes, Pearce, and Barker 2011). In the context of YouTube this is shown by the number of institutions hosting content on their YouTube channels for promotional purposes. However Weigel argues that new technologies can enhance the richness of the learning environment through combining 'bricks and clicks': where online video resources can "enrich and extend the students' exploration of new territory" (Weigel 2002).

The potential impact of YouTube on teaching has begun to be explored in the academic literature. A recently published literature review examined 188 peer reviewed journal articles and conference papers with 'YouTube' in the title (Snelson 2011). The recent arrival of YouTube and the length of time typically involved in peer review, as well as the review's narrow focus, would suggest that 188 peer reviewed scholarly artefacts represent an under-estimate of the academic interest in the use of online video. Whilst the review considered a wide range of articles, of interest to this project was a subset of 13 articles that included instructional strategies and general tips for incorporating YouTube videos in the classroom. Many of these were from fields with limited application to sociology (e.g. medical education, where videos could be used to demonstrate complex procedures).

Of particular relevance is an article about the incorporation of multimedia content in a sociology course in the USA (Miller 2009). Here the author incorporates multimedia content (audio as well as video) into their introductory sociology course and states:

> [The] most critical function in terms of cognitive learning appears to lie in their capacity to serve as representational applications for key ideas. Whether in the form of a news story, movie clip, interview or documentary, information and illustrations afforded by media are particularly valuable in helping students acquire the initial mental imagery essential for conceptual understanding. (Miller 2009)

This quite clearly relates to Weigel's idea of the internet enhancing the richness of the educational experience. In addition to this use of multimedia a variety of other uses are suggested, including as an icebreaker for initiating classes. This is similar to another US sociologist who uses topically relevant songs to start his sessions (Palmer 2011). The Miller article provides a good list of some of the potential issues and problems that may arise from employing online media, and these include student resistance (possibly as a result of technological limitations) and technical issues such as broken links, poor image quality and classroom technical problems, although he concludes that "multimedia integration is not a daunting task" (Miller 2009).

John Seely Brown discusses a case study where video materials were viewed by groups of students who were unable to access more traditional lectures. They viewed the videos as a group in a social setting. Viewed in this way students collaboratively constructed their own meaning of the material, and went on to outperform the students who had only attended lectures (Brown 2000). This is an important point: this project does not just propose incorporating videos as a replacement for lecture material, or as a way of 'flipping the classroom' where information transmission takes place outside the class allowing for other classroom activities (which might usually be set as homework), but uses videos as a means of supporting and enhancing learning within the traditional classroom environment.

Using videos in the classroom can be the starting point for class discussions where students use the multimedia potential of YouTube to engage with new and diverse topics and apply their knowledge and understanding of new topics within and beyond the classroom. This specifically social consumption of online video in class has yet to be explored in the literature that has been surveyed, and is the basis of this study which examines the role of online video in students' learning both within the classroom and outside of it.

Methodology

The first activity carried out as part of this project was the collation of videos from YouTube and the creation of an online playlist which at the time of writing contains 32 videos. This playlist covers a range of topic matter from a wide variety of sources. As an indication it includes a feature length documentary about Pierre Bourdieu (in seven parts), a 10 minute animation video produced by an further education (FE) lecturer about Weber's Protestant Work Ethic and the Spirit of Capitalism, and a comedy sketch from John Cleese, Ronnie Barker and Ronnie Corbett illustrating social class in Britain. Some of these have been produced specifically for a sociological audience and others have not, but they have all been selected by the lecturer as a useful resource for students taking an introductory sociology class.

The initial intention was to publicise the playlist via the C-SAP community and encourage contributions from other sociology teachers. This achieved a certain degree of success although not the impact hoped for. The playlist was embedded within the virtual learning environment (VLE) and promoted to students. The playlist was viewed 290 times (as of 20th June 2011) but there are no further data on

unique viewers or their location. This figure may seem relatively disappointing but only relates to users who accessed the playlist, rather than aggregating users who viewed the individual videos within it, which were linked to independently within the course materials.

The next stage of the project was incorporating the videos into the course. Not all of the videos were used in class (e.g. the Bourdieu film) but many were incorporated into the class sessions, which were three hours long. There was a range of videos used, and they were used for a variety of reasons. Some were used to introduce key sociologists to the group, others illustrated key points or data in an engaging way and yet others provided light relief whilst still reinforcing key concepts. These videos were included as links or embedded within the PowerPoint slides which were available in the VLE alongside the separately embedded playlist. Questions were displayed whilst the videos were being viewed by the students to stimulate discussion, encourage critical analysis and promote deeper learning on the part of the students.

In the ninth week of the course a series of three focus groups (24 students in total) was held across both campuses with representation from international, mature and domestic students. The focus groups were promoted in class and through an e-mail list. They were conducted by an experienced co-ordinator who was not linked with the course in any way; this was to ensure that the students could be open about their views of the use of video in class, and confident in being critical if need be. Food and beverages were provided. These sessions were recorded, and the notes were anonymised before being analysed.

Results

In-class use of videos

In the first place the students were asked about watching the videos in class and whether they believed that this was a valid and effective way of supporting and enhancing their learning. The results suggested broad support for this practice and the students also raised certain elements that they believed added to their understanding of the subjective nature of sociology with comments including:

> I think it's desperately important to get the opinion of others than the lecturer. That's where ideas come from, you get discussions going and you bounce back ideas and this leads to something new doesn't it? If you only just had one opinion you wouldn't learn anything.

Acceptable use

The students presented their opinions as to when it was both appropriate and acceptable for the use of videos in class. One theme that frequently came up was the inclusion of further explanation and proper integration of materials. Many of the students commented on specific issues with ensuring that the videos were relevant and integrated into the class.

> The tutor kind of explains the video afterwards as well, which is key.

This also relates to a discussion about the suitable length of video to be used in class. There was no real consensus on this, but it was felt that short 'taster' videos were

preferable and there was evidence that some students would follow these up in their own time.

Facilitated value

One of the key benefits of using videos in class was this ability to initiate class discussion based on the video that had been watched in the whole class environment. In one of the focus groups a student mentioned that they felt that they could easily watch the videos at home, and so did not need to watch them in class. This was disputed by the rest of the group, with comments such as this:

> We've got to understand that not everyone has that time at home to watch these things. People are not just students, they have jobs they have kids. In class they actually get the time to watch the video

> If you watch things at home, I've watched things and just thought 'ah that's pretty' but to watch it in a lecture situation, you analyse it and the lecturer's saying this is because of this [. . .] and you read so much more into it because you're watching it with someone who knows what they're talking about they're explaining it to you.

This suggests that there is quite a lot of benefit in watching the videos in class as a group, as discussed by Seely Brown. Bringing in other sociological voices, by video, is an option that may be more applicable to the social sciences with multiple competing paradigms.

Recommended 'viewing'

Students were also asked about how they assessed the usefulness of the online videos that they watched. There was a range of responses to this with a common theme being the importance of the lecturer as a gatekeeper or trusted guide.

> I hold this as better than anything I could find myself. I could Google sociology and YouTube it, but you just don't know what you are going to get, but if you use something that's been recommended it seems more relevant to me.

> It's the modern version of just being given a reading list isn't it? It's just the same as being given something to read in class. It's quicker, you can learn more and make more connections.

There was some concern about the user generated content as in the comment below:

> I do worry though. We're told not to go onto Wikipedia, and with YouTube it's exactly the same, it's just people uploading things as well, I mean is everything vetted? I mean are things updated between him showing us the link and us going and seeing the material?

This is a valid point, and highlights the overall way in which education engages with social media in (e.g. Wikipedia, Facebook etc.). The user community of YouTube was also mentioned in relation to assessing the quality of the videos:

> You have to look at the comment on it, and how many stars there are on it.

Clearly there is an issue with using the user community ratings to assess the educational value of content. The user community will be rating the videos on their own terms for things such as entertainment value, which may not overlap with

educational quality. Another student took a more measured view on assessing video quality:

> I usually rate the quality of a video by comparison, once you've watched 4 or 5 you sort of know the first one was really good, the second two pale in comparison.

Discussion

Role of the teacher: retention of imparter of knowledge

The results of this research highlight a number of factors surrounding the use of videos in education. Firstly the role of discussion is highly prized by the students, and the video's role in stimulating this was frequently mentioned. Secondly the students valued the teachers' input into these discussions and appreciated the additional commentary provided whilst watching the videos in class. The results indicate that the students felt that the combination of being able to ask questions and offer opinions as well as the benefit from the additional expertise of the lecturer, meant that the video's quality was somehow 'added to'. It would seem that, even though students had access to and were given exactly the same resources, they still felt that there was added value when these were viewed collectively and the role of the teacher in this process was key.

Establishing a benchmark

The students in this group, when asked about how they evaluate the quality of video online stated that they referred to the videos provided by the lecturer as a way of judging the value of a video that they had found themselves. The students appreciated the presentation of differing opinions within the classroom, although they seemed to require an evaluative framework when presented with the choice of selecting their own additional learning material. It was mentioned by several of the students that they saw this material provided by lecturer input as having been 'validated'. This is interesting as it contradicts the assumptions that students are happy to find their own material online and calls into question the extent to which they use this as a mechanism to support their own learning, preferring more traditional approaches of lecture handouts and textbooks to sourcing their own material. It seems that the students on this course were overwhelmed by the variety of learning resources available and as such welcomed a seemingly 'validated' resource as a way of creating a comparative framework and a means of charting a course through other self located material.

Diversity and democracy

One interesting aspect to come out of the research is surrounding the use of videos in the sociology course to highlight the subjective nature of social science. The students recalled incidents where the lecturer had used videos that opposed information he had just outlined to them as a way of representing other views and described these incidents positively, stating that this had 'helped [them] make up [their] own mind(s)'. Being able to analyse different arguments and weigh the merit of these is a process involved in deep learning, where a learner has to actively engage with material and make value judgements based on their own opinion. In this use of video, there is

evidence to suggest that by providing these other opinions and opposing arguments, the students were critically analysing information with which they were presented and synthesising their own conclusions, a fundamental feature of deep learning. This indicates that the facilitated use of video can be escalated on Bloom's taxonomy to reach higher order thinking skills and not simply the lower order of understanding and remembering. The students spoke about 'humility' on the part of the lecturer in allowing other oppositional arguments be shown and as such felt 'freer to express [their] own opinions in class discussions'.

Social and sharing

The students used the videos almost as a social currency between members of the class and as a way of fostering bonds in social networking sites. They spoke of how they would often post videos, (not always education related) onto their friend's walls, and use this as a way of starting conversation that would sometimes lead to conversations about work. The students also had positive feelings and were actively seeking to share materials with other members of their class. In the focus group, the students asked about the possibility of sharing videos that they found online with a wider audience than just friends on facebook. When asked about what format they thought that this could take and what could be done with it, they suggested it could be given to the next year's cohort as a way of finding some of the resources that they had found useful during the time on their course.

Conclusions

The focus groups discovered a wide range of complex issues surrounding the use of online videos in learning and teaching. These included the extent to which video was already incorporated into some of their learning, the willingness to collaborate and contribute to the communal playlist and the strategies that students used to assess the quality of videos that they discovered and are actively establishing their own mechanisms for quality assurance and benchmarking. Some of these strategies will be effective, but there is a danger of being exposed to misleading or incorrect material, in particular about potentially contentious issues such as feminism. The lecturer was sent a link to a video by a student which was a satirical description of feminists by a right wing American group, confusingly presented as if created by a feminist group. To a student unfamiliar with these kinds of debates it could have been taken as an entertaining look at a complex issue, despite the educational content being negligible. This might suggest that in future some form of video literacy could be included within key skills provision, to encourage the kinds of critical thinking that students are already being encouraged to develop with text-based resources.

The results of this research indicate that the students interviewed felt that the use of videos was an effective way of supporting their learning. They offer a number of explanations for this, providing alternative views and opinions on subjects, providing variety in delivery mechanisms, and using every day examples to illustrate points. The students overall did not feel that the use of videos represented poor value for money and felt that the facilitated use of these teaching materials surpassed any autonomous use of these as they valued the additional explanations and discussion that accompanied them.

What can be determined by the results of this research is that the students interviewed had a traditional assumption of the role and authority of the teacher and that these views are not easily displaced by the introduction of video resources. The aspect which students valued most was the discussions surrounding the resources. This is an interesting outcome as it supports a constructivist approach to teaching and learning that whilst including content is an important element, the focus should be on the discussions that surround this.

The results of this research confirm that the use of video in education can be an effective way of engaging students and supporting their understanding. Video production can be a costly and time consuming activity, in both staff time and if done to a high quality, equipment. The results show that the use of open educational resources is not viewed by students as a poor alternative and that, as long as properly facilitated and integrated into the lesson, the perceptions of students of this material do not diminish the perceived effectiveness of this method. In a *'colder climate'* this has implications since the use of open access content can allow staff to focus the ways in which to facilitate the delivery of these open access educational resources instead of being concerned with generation of new content thus encouraging deeper learning and, in the case of this research, potentially improving the student learning experience by supporting communication, increasing interaction and giving a wider view of their chosen subject. The use of freely available online materials in class can enhance students' learning if it is used to stimulate class discussion and not as a substitute for it.

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