Library induction with YouTube, Camtasia and an iPad

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Part of my role is to work as a subject librarian for performing arts. I've previously introduced first-year students to the library via a 20-minute tour followed by a 40-minute hands-on session with our online resources. The tour element is time-consuming and disruptive for other students, so I decided to replace it with a YouTube video. My intended learning objectives would remain the same: orientation around the building, how to find a book on the shelf and how to borrow it using the self-issue machines. Basic training, in other words, for students who may not have had access to a school library.

WHY CAMTASIA?

I was recently talking to one of the lecturers who works with industry-standard video editing tools. I happened to mention that I was working on an induction video with Camtasia software and an iPad. 'Interesting', he said, struggling to turn total scorn into mild condescension. Camtasia is not renowned as all-purpose video editing software, marketed instead for its ability to capture screencasts.

But it had several advantages for me. Firstly, I didn't have access to premium video editing software like Final Cut Pro or Avid Media Composer. Just as The Stooges built their own drum kit from oil cans in 1967, I had Camtasia, an iPad and Photoshop. Secondly, I liked the idea of integrating video footage with screen-captured material in order to add variety and visual interest. Lacking a video camera, I was intrigued by the potential of the iPad's camera. If Korean director Park Chan-wook can make a film with an iPhone, then surely the iPad would suffice for a library video? I had also been on a Camtasia training day with JISC Digital Media in July 2011, but had not

yet found an opportunity to put my training into practice. More fundamentally, would a YouTube library tour be an effective learning activity for my students?

PEDAGOGICAL CONSIDERATIONS

One of my early technical decisions was not to use the Camtasia functions that are designed to create a more interactive experience for viewers. These functions, for example, allow viewers to choose which section of the video they want to watch (via a menu system), and allow quizzes to be set at the end of video segments.

Ideally, I would have preferred to keep students actively engaged with my online tour. 'Providing practice' is one the four areas identified by Boud and Prosser¹ as critical to the design of e-learning. However, I had no choice – the interactive Camtasia functions don't work on YouTube. Even if I'd uploaded an interactive Camtasia video in its native Flash format to a different platform, such as Screencast.com, the interactive features wouldn't work with iPads and iPhones (due to a long-running dispute between Apple and Adobe, the makers of Flash). YouTube videos, on the other hand, will play on just about every device imaginable.

Without interactive elements, my online tour might be compared to the traditional lecture format: a one-way transmission of information, with students taking a passive role. Yet the online video brings a number of advantages, even without interactivity. Firstly, it allows for asynchronous learning, where students are free to learn at a time and place of their own choosing. Secondly, it allows the deployment of a number of audio-visual elements not always available in a face-to-face lecture: music, moving images and film-editing techniques. These elements can create a more memorable and enjoyable learning experience, particularly for students with visual and aural learning styles.2 Thirdly, some research indicates that students themselves prefer online video. For example, a study by Silver and Nickel³ found that 63.5% of students 'preferred using an online tutorial over a library orientation session held in a classroom'.

FEASIBILITY STUDY

Before I began the project, I wanted to make absolutely sure that it is technically possible to edit iPad video with Camtasia and upload it to YouTube. These initial tests and investigations proved vital as my project progressed.

Camtasia was able to upload iPad video footage (MOV file format) successfully, integrate it with screen capture footage (CAMREC file format) and render it into a final video. I was impressed by how easy it is to drop files in and out of the Camtasia editing timeline, and that the editing process is non-destructive. This latter feature is crucial because, from the outset, I was aware that I would probably need to make an annual revision of my video to reflect the inevitable changes to our building layout and systems. Even as I was making the video I was forced to revise it when our catalogue was rebranded with the new university logo. Non-destructive editing means that all my original files are preserved intact, should I need to move or re-edit footage for future updates.

However, I also read ominous warnings about video editing with Camtasia, such as this message from an online forum: 4 'you really don't want your Camtasia project file to exceed 420K. Once this happens, your project goes unstable, previews stop working, and other bad behaviour may occur.' I decided to press on regardless, as it would be possible to work around this problem by dividing my project into smaller segments, rendering them, then stitching them back together into a final video.

RUNNING TIME

Although YouTube allows a maximum running time of 15 minutes per video, I wanted to keep my video shorter than ten minutes. As Morain and Swarts⁵ have noted 'Students frequently turn to YouTube to fill their own learning gaps.' Training videos are ideally kept short when addressing these ad hoc attempts at self-improvement. The limited attention span of Generation Y otherwise causes restlessness. With this in mind, my colleagues and I are about to produce a series of one-minute videos focusing on specific resources and issues.

A longer running time may be more suitable in situations where a lecturer expects students very quickly to attain the broad skill set necessary to conduct academic research. In such a situation it is difficult to imagine a lecturer collating a list of hyperlinks from an atomised collection of tiny videos (and even harder to imagine students watching them all). The solution may be to build a repository of small videos in a standard format

from which librarians can custom-make longer videos on demand for a particular course.

SCRIPTING AND STORYBOARDING

Learning technologists and librarians often emphasise storyboarding and pre-scripting as best practice for creating online videos: this can 'give a more polished and professional result';6 'the narrators of good videos had either scripted their lines or had at least rehearsed them';5 'the more detailed the storyboards, the easier...to produce them'.7

I followed conventional wisdom, scripting my monologue and jotting down some ideas for the visuals. With the benefit of hindsight, this sometimes gives my video a stilted tone, which I would try to avoid at any second attempt. There is perhaps an analogy between the novice lecturer who writes down every comment in PowerPoint speaker notes, and the relaxed veteran who is able to improvise without notes. Or as Werner Herzog puts it 'storyboards are for cowards, for those who lack imagination, for those who are bureaucratic and nothing else on the set';8 writing scripts for documentaries 'only creates dead films as seen on TV'.9

SHOOTING THE VIDEO

The iPad was easy to operate. I filmed everything myself, apart from two pieces to camera. I attempted to film at quiet times, to avoid background noise and students wandering into shot. Nonetheless there were a number of reshoots, particularly for long takes such as the point-ofview section. Background noise still intruded, and I realised there would be significant overdubbing in post-production. Another motivation for overdubbing is that the iPad's in-built microphone is not perfectly suited for shooting video: it's non-directional and it is easy to cover it accidentally your hand.

Post-production

Kimball and O'Connor argue that music helps learning because it 'activates different parts of the brain that are not involved in language processing, especially when the listener encounters something unexpected. Adding music to IL [information literacy] instruction is an excellent means for... increasing students' retention and recall.'

Unfortunately, as YouTube themselves advise,¹¹ 'if you use an audio track of a sound recording

owned by a record label without that record label's permission, your video may be infringing the copyrights of others'. I found the website of a character called Rick Vanman offering copyright-free and royalty-free music 'to use safely in thier [sic] YouTube / amateur film projects AND COMMERCIAL PROJECTS etc'. Nervous about the credibility of a website 'proudly sponsored by Wolf Windshields', I have strictly followed Rick Vanman's licensing terms and also downloaded a copy of his website, for insurance, in case its terms are altered. ¹²

One of the disadvantages of overdubbing, as opposed to live sound, is that it can prove difficult to match audio timings with the video footage. At certain points I found my audio commentary had more information to impart than could be crammed over my video footage. Freeze-frames gave me a way round this problem: I extracted single frames from the video and was able to stretch them to exactly the length needed for my audio commentary.

I used a title sequence to brand my video with the new Bath Spa logo. The animated graphics are one of a number of such MP4 sequences that are bundled with Camtasia. Black and white intertitles were used to provide viewers with a clear organisational structure throughout the video. There is evidence that a segmented on-screen presentation has better learning outcomes than a continuous narrative. 13 I also improvised an end credit sequence by screen capturing a PowerPoint presentation with a scrolling effect. The sequence fulfils the terms of Rick Vanman's licence by crediting him.

UPLOAD TO YOUTUBE

By the end of the editing process I had created a complicated timeline (see below) and a project file size of 390KB. This did not bode well for rendering the video and uploading it to YouTube, given the warning about file sizes I'd discovered earlier...

I had hoped to use the Camtasia setting that is designed to render a video as a YouTube-friendly

MP4 file. However, this caused Camtasia to crash on every attempt.

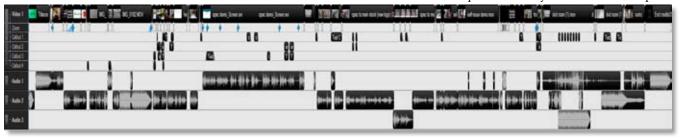
Instead, I was able to produce my video as an AVI file. The downside was that 'AVIs encoded with the Techsmith Screen Capture Codec are completely lossless'. ¹⁴ That meant the resultant file size was so large (8GB) that it would have taken several days to upload into YouTube; so I used another piece of software called Total Video Converter to compress my video to 794MB, which took about 3.5 hours to upload.

EVALUATION

I couldn't evaluate my video's impact on the information literacy of 'real' first-year students because this teaching takes place at the start of the academic year. I therefore asked our part-time library helpers to watch it and complete an anonymous online survey. The helpers are themselves students, so I hoped they would give me a reasonably accurate insight into what my target audience might think. As there were only seven responses, the results must be treated with caution.

The overall verdict was that my video was 'Quite good/OK'. The overall approval rating improved when I asked a similar question with the qualifier 'compared to other videos about subjects which are not, in themselves, hugely exciting...' This discrepancy suggests that students base their overall opinion of an educational video by comparing it against everything they watch online, not merely 'boring' educational material. This observation is borne out by some of the suggested improvements, which hint at expectations based on wider viewing rather than the legal and practical constraints that a library operates within. For example: 'I thought the choice of music could be changed, prehaps [sic] one, more well known song for each part.'

Three students thought that the video might be better if students themselves had made it: 'people will respond better student to student.' This indicates how students are becoming habituated to peer-to-peer socially shared video, rather than the 1970s Open University model with an 'expert'



in a white lab coat. It would be difficult in practice (how would the video be updated once the students had left?) and in terms of quality control. Perhaps certain elements could be outsourced to students under my overall direction? For example I could outsource my soundtrack to the music department.

My efforts to restrict the running time of my video down were borne out by the survey: it was 'just about right' for 71%. Four of the responses suggested things that might have been explored in more depth. In fact some of these suggestions, such as exploration of the Journals Room, had been filmed and cut out at the editing stage in order to reduce the running time – a difficult balancing act.

I was interested to find out from students 'what do you think would be the most effective way of getting first-year students to actually watch the video'. Clearly if no one watches the video it will have a poor learning outcome, even compared to my existing physical tour, which, if nothing else, most first-year students are frogmarched into. The respondents felt it would be most effective to send a link via email.

Although the feedback from this survey was useful, the ultimate test of whether my video has achieved its learning objectives will be next academic year. As there are no interactive elements in the video itself, success or failure will be measured through formative assessment in my face-to-face teaching sessions: 'How many of you have watched the YouTube tour'? 'How many of you have managed to find and borrow items since watching the video?' 'Did it help you?' 'What could be developed further?'

CONCLUSION

On the whole, I was pleased with how polished the final YouTube video looked. The iPad video footage has a sharp enough resolution for YouTube, even viewed at full-screen size. Camtasia proved workable for this small-scale project, but would be fiddly for something larger, given its restrictions on file size and the problems in uploading to YouTube.

Although my survey suggests that students are lukewarm towards the video, the question I perhaps should have asked is whether they would still prefer to be taken on a 20-minute trek around the library? I suspect not... The opportunity cost of the physical library tour has become unten-

able, as I need more time to train students in e-resources and to work on the backroom systems that make our e-resources a more seamless experience. It is a price worth paying if fewer students experience a library tour as a result of its being moved online.

The video is available at http://tinyurl.com/cgupoxm

Notes

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