

Learning Bytes Session: Wednesday 24 May 2011, 12:15-13:15

Screencasting

The session was facilitated by Andy Raistrick (Computing and Library Services), Cath Ellis (Music, Humanities and Media) and James Wilson (Business School)

Pedagogical principles of using screencasts in teaching and learning

Cath Ellis explained that a screencast was a combination of computer screen images which are then synched with audio, and delivered usually via the web to be viewed on demand. This is sometimes described as web based lecture technology (WBLT). People in general are starting to become much more on-demand learners, for example there are numerous 'tutorials' available on YouTube for people to use for example to learn how to knit. Alongside resources for practical application, there are also numerous learning materials available; Cath gave the example of the Khan Academy, a non-profit educational organisation created by Salman Khan, which provides free online tutorial stored on YouTube.

Screencasts should be used to enhance rather than replicate classroom lectures. Research has been undertaken into how we learn best, and this is by being 'told and shown' something at the same time as opposed to just 'told'. Students will watch a screencast over and over again, will pause and make notes. Ideally teaching materials should be designed to encourage students to make notes not take notes (i.e. to be able to think and reflect on what they are learning, rather than just writing down what they hear). Attention spans should be taken into account so screencasts should be an appropriate length of time, around 10-15 minutes, followed by an activity to reinforce the learning. They should be visually interesting and production values are important especially in terms of audio quality. Students will often re-visit screencast materials around assessment time when they are revising.

Practical production and application

Andy Raistrick gave a presentation on the technical aspects of screencasting. Screencasts are generally seen as fitting into one of two categories, either information or instructional (often how to do certain tasks in terms of software skills).

There is both free and commercial software available to produce screencasts:

- Jing: free but 5 minutes limit and no editing – so have to get it right first time;
- Screenr: free, web-based, so can use anywhere;
- Jing Pro - low cost approx £11.50 per year, slightly more editing capabilities
- Camtasia – licensed for around £112
- Adobe Captivate – licensed for around £80

Computing Services have a laptop with Camtasia software and a microphone that is available to borrow.

If all you are wanting is to narrate to a PowerPoint presentation then this function is available though it is limited.

Four-stages are involved in making a screencast:

- planning,
- preproduction,
- production
- postproduction

Planning

This should include consideration of 'learning goals', content, format, length, and distribution format – where it will be used (e.g. in a lecture) or uploaded to. Copyright issues should be considered so for example if you download images from the web and plan to publish your screencast on YouTube – you should be aware that it will get noticed.

Preproduction – getting everything prepared

Create and gather resources for example a PowerPoint presentation, script (or bulleted memory aid), video, images and any additional sound needed.

Gather the equipment you will need – PC with software, microphone or headset (depending on individual preference) and test that everything is working properly by doing a quick 20-30 second test piece.

Production – capturing your screencast

A really quiet place to record is essential, and it is best to close everything down on the PC except what you need. Capture big – produce small, ideally use full screen mode and capture the screen image as large as possible so that you can get the best quality possible. If you make mistakes it is best to keep on going and edit them out later.

Postproduction – editing stage following capture

There are a number of tools available within the screencasting software to edit and refine your screencast. These include cut and splice (to remove mistakes) and audio levelling and noise reduction to get the best possible sound quality. Transitions, callouts, zoom and pan and closed captions can all be used to add emphasis and enhance the material. Quizzes can be added and the final screencast can be exported for web-streaming or to embed in Blackboard.

Andy showed a short screencast that demonstrated some of the features which can be produced with commercial software such as Camtasia and Captivate.

- Students like to see who is narrating – and recommends 'introducing' yourself by including a small window in the corner of the screen for the first few seconds of the recording
- speech to text functionality can be used to produce 'closed captions' or alternatively these can be manually edited, or you can upload the script and indicate where it is to be included
- cognitive process: zoom and pan and call outs i.e. big arrow, circle, highlight and grey out the background etc - to focus attention

- transitions move from one place to another or one area to another and can be subtle to obvious
- quizzes – can fork to a part of the video based on your answer e.g. select ‘no’ to a question and effectively rewind to appropriate point, use to reinforce learning or confirm understanding.
- general editing tools can be used for cutting and splicing, removal of mistakes, still images or a watermark e.g. with University logo, normalise sound and add in background sound if required.

Other considerations

It can take a while to produce a screencast; you will need to decide what production values are needed depending on your target audience and how much time is worth investing in the project. For example, producing something of a higher quality will take longer.

Academic staff considering producing their own screencasts and investing time should consider investing in the software; however some Schools have provided a number of laptops for their staff to use. The School of Music, Humanities and Media have sound-proofed recording studios which can be booked (at quiet times of the year). There are a number of colleagues across schools who are already producing screencasts and maybe able to offer advice to those just starting out. There are also centrally provided staff development sessions, which will give staff an overview and the opportunity to try the software.

Post production can be a bit of a learning curve and take some time to get right. Software such as Camtasia, allows you to save and reuse settings once you are happy with them.

James Wilson a tutor in the law school talked about his experiences

James Wilson who works in the Law department of the Business School talked about the screencasts he has produced over the last few months. He has made around seven, all of which relate to referencing and legal citation, which tend to be the areas that his students’ struggle with the most. In addition these are areas which are conducive to being covered in a screencast, and topics which James ‘repeat’ lectures on. Now when students need to revise these areas, James is able to point them in the direction of this material. James used QuickTime Pro to produce the screencasts and then uploaded them to YouTube, via this route ‘Google’ produces variants that are suitable for delivery across multiple platforms e.g. – iphone, PC, Mac etc. Uploading to YouTube was very easy, you just need to remember to record and upload in as high a quality as possible. YouTube analytics allows you to see what has been accessed and how often. Uploading to YouTube means that the materials are effectively available to anyone; James made sure the content was appropriate, proofed and quality checked and used University branding. He also uses a lot of ‘Creative Commons’ materials which are effectively free, though the originator must be credited.

James has no firm evidence of whether the screencasts have improved the referencing and citation skills of his students but he believes so. Feedback from students has been positive. The key to on-

demand learning is that it is about when students need the learning – not when we want to deliver it to them. E.g. plagiarism is often covered at the start of the course, in Induction week.

A discussion was held out around the appropriateness of uploading resources to YouTube and making them available to anyone. On the one hand and ideologically it is good to share, however we are working in a competitive environment. We also need to be aware of quality issues and that we are representing the University and upholding its reputation. One option is to put up tasters, or alternatively it might be better to upload to UniTube which is a 'Flash' based system so works in the same way as YouTube.

The possibility of encouraging students to submit assessments in screencast format was also talked about. Some students are choosing to submit, voiced submissions if given the option, often using VoiceThread, which is a free online tool with which you can produce collaborative multimedia slide shows. There is the option of recording voice along with other alternatives. It was felt likely that eventually all PCs will have screencasting software installed as standard.