The Innovative Use of Screencasts in Higher Education

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Abstract

This short reflective paper describes the innovative use of the screencasting technique in contemporary Higher Education. The main focus of the work is initially on the use of screencasts in mainstream teaching and student support where examples of screencast usage are demonstrated and evaluated. Later in the paper attention turns to the use of screencasts for staff development or information sharing. Again, examples are provided and briefly analysed. Finally, the author outlines some further opportunities for screencast use and closes with a brief outline of next steps.

Introduction

Ruffini (2012) describes screencasts as "a digital video and audio recording of what occurs on a presenter's computer screen, which can be used to create sophisticated, informationrich multimedia presentations" (page 1).

Since their inception in 2005, screencasts have become widely used in Higher Education (HE). The scope of their usage has increased to include staff development as well as mainstream teaching activity. In fact, it is reported that screencasting now has 'multiple' functions as described by the University of Vermont:

"Screencasting is used in multiple ways in education, for instance, to provide an in-depth explanation of a complex application, to demonstrate mathematical equations, to review part of a lecture that students might benefit from revisiting, or to create a full length slide presentation accompanied by audio narration". (Pg.1)

In essence, screencasts have become a significant part of HE practice and this short reflective paper will describe contemporary screencast use in a number of contexts ranging from mainstream teaching to student support and more general staff development activities.

Screencasting in Mainstream HE Teaching and Student Support

Screencasting for mainstream teaching and student support ranges from short 'bite sized learning chunks' aimed at reinforcing a concept already taught, to full lecture capture using one of the more sophisticated tools such as the 'Panupto Recorder' software. This paper is largely focused on the former, though full lecture capture is briefly mentioned in parts of the discussion.

For bite sized learning chunks '<u>Screencast-O-Matic</u>', a free online tool, has won favour with many practitioners due to its simplicity and its excellent hosting facilities. Despite the inherent dangers of using free online tools and software, which can in the worst case scenario, disappear without warning, contemporary practitioners seem happy to take that risk. As well as teaching staff, practitioners from Library Services, The Career Centre and Student Wellbeing all use Screencast-O-Matic to disseminate information to staff and students, often in short two minute clips:

"The editing features are pretty easy to use and let me zoom in on search screens, for example. I've been making all of <u>our</u> <u>library videos</u> with it" (Jess, library cloud, 2010)

Bite sized learning chunks for mainstream teaching have become hugely popular particularly in mathematics and sciences where students may have easy access to a range of examples and revision materials that they may watch at their leisure with the added advantage of repeat viewing and pausing. These are often quite crude and unpolished from a media perspective but serve a very useful purpose in the process of teaching and learning. The unsophisticated nature of much screencast activity has become a feature that students have come to accept. Tutors and other teaching staff are not expected to be expert media producers and the unskilled nature of many productions has become a predictable feature that is now seen as a 'quirky' part of the genre. To view a typical example click here.

Despite the obvious advantages of screencasting in mathematics and the sciences, practitioners in other subject disciplines have also embraced the screencast method and use it extensively in their everyday practice. Colleagues in schools and faculties at the University of Derby routinely use the Panopto tool for lecture capture and report many positive comments from students who have been unable to attend the face-to-face lecture or may simply be seeking clarification or reinforcement of a concept or idea. Search screens make it simple for learners to seek out appropriate parts of the lecture that they wish to view, thus avoiding the need for time consuming search techniques.

In terms of student support, Stansfield and Freake (2009) report how they used screencasts to 'build confidence' for Open University Physics students prior to a formal examination. A subsequent survey revealed that 82% of students found them "very helpful" while 18% found them "helpful" (pages unnumbered). Furthermore, 85% of respondents stated that they would recommend to future students that they view the exam screencasts; and 94% suggested that they would like similar screencasts on other modules. A glowing endorsement of screencast use in the context described.

Innovative Practice in Higher Education © IPiHE 2013 ISSN: 2044-3315 There is little doubt that screencasting offers much in contemporary HE teaching and student support. It is particularly useful where step-by-step processes are being explained and students can watch, pause and assimilate as they progress through the production. This isn't to say they fulfil all our teaching needs, of course, lack of interactivity and the somewhat behaviourist nature of the learning that takes place may be considered a weakness. Even so, screencasts satisfy an educational need in particular circumstances and within certain bounds. Moreover, screencasting has many other applications ranging from full lecture capture to use in student support activities. In effect, screencasting represents an affordable and successful learning tool the full potential of which is yet to be realised.

Screencasting for Staff Development

Screencasting for staff development or simply the dissemination of useful information has become common in UK institutions. As staff time has been consumed in new and diverse ways the impact on traditional face-to-face staff development sessions has been tangible. It is a fact that staff development in the modern university is now all too often confined to a rushed lunchtime delivery or condensed into a full day of activities at the beginning or end of a semester. Exceptions to this are Post Graduate Certificates or similar qualifications for new teaching staff which are delivered in a variety of ways.

Screencasts offer a pragmatic way forward where staff in different areas of an institution need the same information in a timely and convenient fashion. Take a recent example from the University of Derby where a change in institutional policy determined that academic staff who had traditionally marked work using an alpha scale (A - E), were now required to use percentage marking as an alternative. This change also involved some additional work on updating level descriptors and marking criteria. Screencasting offered the most efficient and effective means of delivering the information required to the largest number of staff possible in the least time feasible. Staff could then watch at their leisure, in their offices or elsewhere and at a time to suit them. As noted by McGovern (2010) this represents an important feature of the screencast tool:

"Students should be able to learn when it suits them, in a location of their choosing, and more importantly, at a pace that suits their level of absorption or cognitive action" (page 1)

A screencast was produced for this purpose and e-mailed out to all teaching staff. <u>Click here</u> to view. Though follow up work was required with some staff teams, the screencast was largely well received and elicited many positive comments during follow-up interviews. A key benefit was that all staff received exactly the same information and this could be viewed several times during the discussions that ensued among module teams. Furthermore, the screencast was sent to UK and international partner institutions thus providing widespread dissemination that was inclusive of all teaching staff.

A further example of screencast use for staff development originates from the use of a short production designed to inform staff about possible routes to obtain a Higher Education Academy fellowship. <u>Click here to view</u>. Traditionally this type of information would have Innovative Practice in Higher Education 3 © IPiHE 2013 ISSN: 2044-3315 been delivered in different areas of the institution in the form of multiple workshops across schools and faculties.

Again, the screencast approach made possible widespread dissemination including the university's UK partners. Consistency of information, timeliness and the inherent benefit of repeat viewing were reported as advantages by respondents. The ability to pause and review content was a feature that again drew positive comments from staff who remarked specifically about the potential for discussion and clarification of pertinent points as the screencast progressed. This is a point picked up by Ruffini (2012) who states:

"The ability to pause or review content also gives students the option to move at their own pace, which is not always feasible in the classroom" (page 2).

It is clear, therefore, that screencasts have much to offer in the context of staff development. Despite the rudimentary nature of many productions made for staff development purposes, the information that they contain and the convenience afforded during dissemination and viewing more than offset concerns about quality. It seems likely we shall see much short-term growth in screencast usage for staff development as again this is an area that is yet to be fully exploited.

Conclusion and Next Steps

The scope for screencast use in Higher Education is immense. This short paper has focused on two main areas of usage, mainstream teaching including student support and staff development. These two areas demonstrate some key applications of screencasting though it should be recognised also that the potential for screencast use is far broader. It is acknowledged that screencasts have certain shortcomings and lack of interactivity along with a somewhat mechanistic approach to learning are widely cited limitations. Even so, screencasts offer much where learning may be broken down into 'bite sized chunks' and; they are a useful dissemination tool wherever information needs to be distributed widely and where standardisation of information is an essential feature. There is evidence of screencasts being used for advertising courses and modules, disseminating assessment briefs, circulating generic feedback following a session or an event or even sending out essential information relating to a change in policy or practice.

As a next step, Higher Education managers and staff developers should ensure that all staff have access to screencasting provision and this should be supplemented by staff training and support wherever necessary. Screencasting has enormous potential to enhance the student experience and increase the efficiency and effectiveness of information sharing, it is thus an important opportunity that should be nurtured and embraced by all those in a position to do so.

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