

## Chapter 13

# Developing Educational Screencasts: A Practitioner's Perspective

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### ABSTRACT

*YouTube to iTunes, company to college websites, there is a seemingly exponential explosion in creating screencasts. A screencast is a digital recording of computer screen activity, often with an audio commentary. Short and engaging, screencasts have the potential to enable learning in new and exciting ways. They are becoming easier to create and, as a teacher in higher education, I have gradually increased my use of screencasts, learning with experience and from the generally positive feedback from students. Drawing on existing research and personal experience, this chapter will introduce screencasts and discuss their potential. The importance of integrating screencasts thoughtfully and carefully into the teaching and learning process will be examined, including pedagogical and instructional design issues. Next a four-step process for creating a screencast will be presented: prepare, capture, produce and publish. Prior to conclusions and final reflections, future research directions will be examined.*

### INTRODUCTION

The other day I wanted to embed a YouTube video into a PowerPoint presentation: to link and view directly a video on YouTube, rather than hyperlink out to an internet browser or embed the downloaded video file. I didn't know how to do this, so I searched YouTube and *hey presto*

a series of videos appeared. Selecting the first video, I watched a screencast showing how to do the task I wanted to do myself. I was able to watch it, pausing at places and switching to my presentation to embed the video I wanted. As well as the basic process, the screencast gave a number of tips. Less than ten minutes later I had completed my task.

A screencast is often used to capture *how-to-do-something*, for example how to use particular

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software. In the vignette above, I learnt and practiced a new skill: I had an immediate need, I found help in a form that was immediate, understandable and engaging, and I used that help to complete my task.

Increasingly educators are blending more online elements with traditional face-to-face teaching, often by simply using a virtual learning environment (VLE) to provide notes and other documentation as well as to communicate with students. As part of a multimedia approach (combinations of video, animations, images, text and sound) to blended learning, screencasts offer a multimedia-rich option to support student learning in particular contexts (such as learning a new skill as above). Thus a screencast can be a standalone multimedia learning object or can be part of a series that together comprise a fuller learning resource, or indeed be part of a learning object that integrates a screencast(s) with other hypermedia elements. Screencasts are becoming easier to create: a computer, some software and a microphone is enough. At the simplest, it could be adding a voiceover to a presentation, perhaps by using the narration feature within Microsoft PowerPoint. A little more complicated is recording on-screen activity with explanatory labels or a voiceover. With more effort, a screencast can integrate some interactivity, including clickable zones and quizzes. The time, resources and expertise required increases with the complexity of the screencast.

So what exactly is a screencast? How does one go about creating a screencast? What are the pedagogical and instructional design, technical and practical issues involved? And, of course, why do it? What are the benefits for learners? The rest of the chapter will explore these questions, starting with examining in more detail what a screencast is and sharing some personal experiences of using screencasts with students.

## EDUCATIONAL SCREENCASTS

A screencast is a digital recording of computer screen activity, often containing audio narration. It is sometimes referred to as a video podcast or simply a video, and also as a *scrast* (verbally shortening the word screencast to one syllable).<sup>1</sup> A screencast gives a *look over my shoulder effect* similar to one-on-one instruction and can be accessed whenever and wherever it is convenient (Educause, 2006). Students particularly value this, flexibly using screencasts to support their learning and thereby allowing for greater learner independence. A screencast usually has control buttons, enabling it to be paused and particular sections to be replayed: this level of learner control over pace is important (Oud, 2009, p. 169). The combination of video and audio appeals to different learning styles (as an alternative to predominantly text-based learning materials) and, as it is produced locally, it may be more approachable than glitzy packaged instructional videos (Kanter, 2008).

Short, sharply focused screencasts can be very useful in supporting students, working at their own pace, to achieve learning outcomes. Screencasts are particularly useful for teaching software applications and showing how to use online tools such as websites and library catalogues, having the following benefits over reading step-by-step instructions, as identified by Mount and Chambers (2008): ‘improving student cognition through improved information integration, reduced information redundancy and an improved representation of the dynamics of software operation’ (p. 49). They can provide engaging revision materials and, like other learning materials, are particularly valued by students if focused on preparing for assessments. Screencasts can be used to give short presentations (mini-lectures of voiceovers over images or PowerPoint slides). These short teaching episodes are best used for topic overviews, difficult concepts and guidelines for the module, projects and assessments as well as for just-in-time support for project- or problem-based approaches.

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