

PODCASTING IN EDUCATION

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[This workshop was delivered by Alice Heywood and Ed Hunton, Film Education.]

ABSTRACT

In this workshop delegates discovered the potential for podcasting within education, learned how to produce multimedia podcasts and how to distribute podcasts.

PODCASTING

Podcasting is a relatively new technology that allows organisations and individuals to deliver multimedia content to an audience on a regular basis with little or no effort on the part of a user. The user simply subscribes to a podcast feed and the content is downloaded to the user's computer when a new podcast episode/programme is available. This podcast can then be played in a computer media player of the user's choice, such as iTunes, or synchronised with the user's portable music player, such as an iPod. This means that the user does not have to go and look for information and is not tied into accessing media at specified times.

The term **podcasting** arose from the amalgamation of the two words **iPod** and **Broadcasting** because it was believed by the early pioneers of this technology that the ubiquitous iPod was an ideal device to listen to podcasts on. It should be pointed out that it is not necessary to listen to a standard podcast on an iPod as other MP3 players can do this too.

A simple analogy for the difference between podcasting and traditional web-based media delivery would be the way different people purchase magazines that interest them. Say I am interested in gardening I could go to my local newsagent or bookshop and look through the shelves and then find a magazine I like the look of. When I have found the gardening magazine I want I can purchase it and take it home to read. Of course I could subscribe to the gardening magazine and get it sent to my home each month for me to read whenever I want. Sometimes I receive my subscription copy of the magazine before it hits the shelves in the shops. This way there is no effort on my behalf and the magazine company is happy because they are making a regular sale.

From a podcasting perspective the equivalent of the shopper buying a magazine from a newsagent is a user going onto the internet find an audio article that interests them and either listening to it in situ via a media player or downloading it. A podcast subscriber uses a programme like iTunes to find a podcast that interests them and then they subscribe to it. This podcast will then continue to flow to the subscriber's computer and music player each time there is a new episode of the podcast, for the subscriber to enjoy wherever and whenever they choose.

Unlike magazine subscriptions the vast majority of podcasts are free but there are some that are accessed via a paid-for service. The quality of some podcasts is questionable but others are very professional – especially those provided by public service radio channels such as the BBC. To find a podcast you can use the iTunes podcasting directory that lists thousands of different podcasts. These are rated by subscribers so you can get an idea about the quality of different podcasts. There are over one thousand (and increasing daily) educational podcasts available at the time of writing and some of these are interesting to listen to but as yet do not have the educational content that would be really useful in schools.

Although podcasting is usually associated with audio files it is possible to podcast pdfs or movies so that they can be viewed via iTunes and, in the case of movies, on a fifth generation iPod.

There are two levels of audio podcast:

- A simple audio feed similar to a radio programme such as is available from the BBC now. This could be played back in any suitable media player, or an MP3 player like an iPod
- An enhanced podcast that allows a user to see synchronised still images whilst hearing the audio, viewing video clips or following URL hyperlinks related to the audio. This type of podcast would use iTunes or an iPod to take advantage of these advanced features

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SO HOW DOES PODCASTING WORK?

This is done in the same way as people subscribe to different news services using news feeds. Traditional news feeds use Really Simple Syndication (RSS) to provide items containing short descriptions of web content together with a link to the full version of the content. Podcasting uses the same sort of system but adds an enclosure to the RSS feed which links to an audio file on a server somewhere on the web. A podcaster records their audio file and uploads it to a location on a server. They then write a small file in XML code that links to the audio file. The XML file provides information such as the title, where the file is, a short explanation of the content, the date of publication and the type and size of file. It would look like this:

```
<item>
<title>DV in Ed newsletter</title>
<link>
http://213.232.94.135/dvined/podcasts/newsletters/dvinednewsletter.MP3
</link>
<description>Hear the latest DV in Education newsletter</description>
<author>dvineducation@mac.com</author>
<pubDate>Thu, 17 Mar 2005 08:52:08 +0000</pubDate>
<enclosure
url="http://213.232.94.135/dvined/podcasts/newsletters/dvinednewsletter.MP3
" length="3683070" type="audio/mpeg"/>
</item>
```

This could be coded by hand but luckily there are programmes available that do the hard bit for you:

- Feeder for the Mac at <http://www.reinventedsoftware.com/feeder>
- RSS Builder for Windows at http://home.hetnet.nl/mr_2/43/bsoft/rssbuilder/

This RSS file is uploaded to the web and linked to/from the podcaster's website.

A potential user then uses a podcast aggregator programme like iTunes, iPodder (<http://www.ipodder.org>) or iPodderX (<http://www.ipodderx.com>) and subscribes to the service. This allows the user to download the audio files to iTunes automatically (or manually if desired) and hence onto the iPod. The convenience of this type of access to audio files should not be underestimated. For example imagine that there is a broadcast on the web you like. Without podcasting you need to remember to listen at the right time or go to the site and listen to the file or hunt down the file to download. With podcasting the downloading to the computer and iPod is all done automatically.

SO WHAT IS THE EDUCATION POTENTIAL?

So how can this be used in education? Just think how useful it would be to get audio files directly to students' iPods or computers without having to rely on them to go and get the information. These audio files could take different forms:

- texts that would have been read in the past
- a teacher's commentary on a text that the pupils are studying
- foreign language dialogues and vocabulary
- recorded lectures
- music to be studied
- interviews with experts
- podcasts from other schools
- public service broadcasts delivered through the podcast medium

In addition to audio files, other material can be delivered in the same way such as video and pdf files. With this in mind it would be possible to deliver a large amount of course material through the medium of podcasting.

From the creative point of view there then becomes a real point in students recording their own podcasts as they know that they will have a real web audience. Students could podcast:

- their own radio programmes
- guides to local areas (Podguides)
- digital stories
- documentaries including interviews

These student-created podcasts are really effective if the podcast file is enhanced with the use of imagery, supporting text and hyperlinks to web material.

SO HOW DO YOU CREATE AN ENHANCED PODCAST?

The enhanced podcast format was introduced by Apple in June 2005 and to begin with required authors to do some serious coding work and the use of Terminal on a Mac. At the time of writing there are simpler options available such as Kudlian's podcaster application (www.kudlian.net) that allow users to turn their audio file into an enhanced podcast including:

- chapters that allow a user to navigate the podcast in iTunes and on the iPod
- titles to give a user an indication of where they are in the podcast
- images to give the user additional information in iTunes and on the iPod
- text support to give additional information about the podcast
- hyperlinks that allow a user using iTunes to link to relevant web pages

HOW TO RECORD A PODCAST

Recording a podcast is actually quite straightforward given the right hardware and software. You will need the following:

- a good mic
- a computer with a mic or audio input
- software that will allow recording (ideally multiple simultaneous tracks) and editing of multiple tracks
- software that will allow exporting to MP3

The ideal simple choice to do this is either GarageBand or Audacity, which has fewer features. You can also use a portable recorder such as an iPod with Griffin iTalk to record audio out and about but audio will be of a lower quality.

If you want to record interviews from Skype or iChat you will need to use programmes that can record the audio produced by other programmes like Audio Hijack, Soundflower or Audio Grabber.

David Baugh is a primary trained teacher with classroom experience in all ages from 5–11. Until 2001 he was Teacher and ICT Coordinator at Ysgol Frongoch School in Denbigh. He is now the Advisor for ICT in Denbighshire LEA with responsibility for all aspects of ICT in 65 schools. He has been an Apple Distinguished Educator for six years and was the winner of the Teaching Awards Creative Use of ICT award in 2000 and BECTA's ICT in Practice awards in 2001. He has an interest in the development of creativity in education especially with reference to its relevance to ICT. This interest has led to long term investigations into the use and best practice of Digital Video and multimedia in education and its role in the creative learning process. He set up the DV in Education (www.dvined.org.uk) and the iPod in Education (www.ipodined.org) websites, visited by over 50,000 people a week. He has developed online courses used by over 700 teachers.