Professional Education Workshop: August 22, 2007

Exploring the Social Software revolution and its potential in e-learning:

Wikis, Blogs and Podcasting

Social software and Web 2.0

According to the cybercommunity this is all about 'Connectivism' (http://www.connectivism.ca/blog/), the Read and Write Web, Social software (http://lklsocialsoftware.wordpress.com/) and

http://news.bbc.co.uk/1/hi/programmes/click_online/5391258.stm

empowering users of Webspaces to promote sharing of personal information and enhancing connectivity through the social networks so created.

"Web 2.0 technologies are characterised by a dynamic social element, with a focus on collaboration and sharing of material that distinguishes them from traditional Web technologies which merely transmit information between website and client. The discussion of the usefulness of Web 2.0 tools has now moved into the realm of e-learning, with teachers and researchers investigating how informal social technologies can be integrated into formal education, as well as how - or even whether - they might also be applicable to research and administration" (The Learning Technologies Group at Oxford University Computing Services 2006).

Some of the more common applications involved with Web 2.0 which promote the social interactivity are

Wikis, Blogs, Podcasting, You tube, Flickr and the like

Wikis

(Picture from:**http://www.70slivekidvid.com/jason/wiki.jpg**)

What is a Wiki?

Definition of a Wiki:

"Wiki is a piece of server software that allows users to freely create and edit Web page content using any Web browser.

Wiki supports hyperlinks and has a simple text syntax for creating new pages and crosslinks between internal pages on the fly."

http://wiki.org/wiki.cgi?WhatIsWiki

"The word "Wiki" originates from the Hawaiian "Wiki", which means "quick". Wikis have been in existence for over ten years. They were first described and introduced to users of the World Wide Web in 1995 by Ward Cunningham who also developed the original software."

(Leuf, B and Cunningham, W. (2001).
The Wiki Way: Quick collaboration on the Web,
pub: Addison-Wesley Longman.)

How do you create a Wiki?

There are lots of different Wiki software available, which use different programming languages.

http://c2.com/cgi-bin/wiki?WikiEngines

Many Wikis use Camel Case text to establish the initial Wiki page

eg: WintecWorkshop

In the above example the name of the Wiki comprises two words joined together, the first letter of each word being in capitals.

When created using Wiki software the page name looks like

WintecWorkshop?

The '?' is a live link and by clicking on the link a new page with the title is created. This can then be edited to create content.

Some of the more sophisticated Wiki sites remove the need to use Camel case and create Wikis directly from a Wizard or by altering the last part of the url.

Now create your own ☺

Go to

http://ctliwiki.unitec.ac.nz/

Some of the features of Wikis are:

Content is instantly published

Links are easily created

Only need a browser to use a Wiki

No need to know complex programming or Web languages.

Information is easily shared

Work well for collaborative activites, such as brainstorming, lists, event planning, and document creation.

Some things to watch out for

Because anyone can post a contribution, people can populate wiki pages with spam.
However, most wiki software offers the ability to lock pages down.

When several users are editing pages at the same time, conflicts can occur.
However, there is the ability to view current text plus the text you were working on, allowing you to fit both together.

What can you use a Wiki for?

Support collaborative contribution to documents

Enable students/colleagues to add content to a shared page

Group writing an outline for a project
Brainstorming
Collaborative document creation
Event planning
Development of a shared web resource collection

Provide a space students/colleagues can use to publicly display information

Who uses a Wiki?

World's biggest Wiki:

http://www.wikepedia.org

An example of Wiki created in conjunction with the publication of a book with the same name:

http://ltc.umanitoba.ca/KnowingKnowledge/index.php/Main_Page

Have a look at

http://wikiventure.falkor.gen.nz/wiki

Where can you find more Wiki information/help

http://ltxserver.unitec.ac.nz/mediawiki/index.php/Teaching%26Learning_with_Technology_Examples

http://wiki.org/wiki.cgi?WhatIsWiki

http://www.oreillynet.com/pub/a/network/2006/07/07/what-is-a-wiki.html

http://www.usemod.com/cgi-bin/wiki.pl?WhatIsaWiki

http://tecfa.unige.ch/guides/tie/html/wikis/wikis-2.html

http://c2.com/cgi-bin/wiki?WikiWikiWeb

Blogs

(Picture from:**http://blogs.jobdig.com/**)

What is a Blog?

A blog is basically a journal that is available on the Web. The activity of updating a Blog is "blogging" and someone who keeps a blog is a "blogger." Blogs are typically updated daily using software that allows people with little or no technical background to update and maintain the Blog.

Explore the information on the following site which has lots of information and many, many links relating to Blogs and blogging:

http://askbobrankin.com/create_a_blog.html

How do you create a Blog?

Several Websites are available where you can create a free Blog. Other sites which include more resources and facilities may charge for creating Blogs. Blogger.com and Typepad are popular sites.

Professional blogging software such as Moveable Type and WordPress are available for download if you have your own domain name and hosting account. This software enables some flexibility in the way your Blog is structured and includes some different features some of which e.g. search engine use, are customisable.

Some useful tutorials

How to Create a Blog site: Drupal and Wordpress:

http://www.siteground.com/tutorials/blog/index.htm

This site (MindBlog) has some useful guides and information in its "New Blog Creation Series"

http://www.fyreplace.com/nbcs/

This one provides a tutorial for Blogger.com and promotes the use of Gmail

http://www.homestead.com/prosites-vstevens/files/efi/blogger_tutorial.htm

Free to Blog:

http://www.blogger.com

For Vloggers (Video Blogs)

http://www.blip.tv/

http://livejournal.com/

Cost involved:

http://www.typepad.com/

http://www.apple.com/ilife/iweb/

What can you use a Blog for?

 Here are a few suggestions:

- Journal,
- Diary,
- Bulletin board,
- Interest column,
- Forum,
- Log of activities,
- Note taking for a course of study.

The term "Blog" is derived from "web log". Essentially it is a web-based chronological record of some event/events/ personal interests etc in most cases by a single author, sometimes with the facility for comments to be made by others. Amongst a raft of other subjects, people Blog about politics, technology, sports, media, education, religion and themselves.

Who uses a Blog?

Here are a few sites to explore:

Blogs in education:

http://awd.cl.uh.edu/blog/

http://www.blogsearchengine.com/

http://www.findblogs.com/

http://www.elearnspace.org/edutechblogs.htm

http://blog.core-ed.net/derek/

http://cogdogblog.com/

http://knowingknowledge.com/blog/index.php

Knowledge-at-Work

http://denham.typepad.com/

Where can you find more information/help on Blogs?

Google it, there are many, many Websites about Blogs.

Podcasts

What is podcasting?

Podcasting is: A method for delivering audio and video over the Internet. A standard podcast consists of an MP3 file uploaded to the Web for listeners to download and listen to on a computer or portable MP3 player.

The name comes from the Apple iPod, arguably the most popular portable audio player.

The difference between an ordinary MP3 and a podcast is that the podcast is set up to be accessed via an RSS feed, whether from your site, the iTunes site, or some other RSS host/directory server.

A podcast differs from streaming audio in which a file plays back from a server. With podcasting, the listener downloads the MP3 or MOV file onto their computer. The listener can then play it whenever convenient on his or her computer, or choose to transfer it to their audio player to listen while on the go.

In generic terms - it is *Personal Broadcasting*

Have a look at the following sites for some more in depth information:

http://www.podcastingnews.com/articles/What_is_Podcasting.html

http://digitalmedia.oreilly.com/2005/07/20/WhatIsPodcasting.html

What is RSS?

Rich Site Summary or RDF [Resource Description Framework] Site Summary). An XML format for sharing content among different Web sites such as news items.

How does it work? A Web site can allow other sites to publish some of its content by creating an RSS document and registers the document with an RSS publisher. A web publisher can post a link to the rss feed so users can read the distributed content on his/her site. ... mason.gmu.edu/~montecin/netterms.htm

What are MP3 and AAC?

MP3 is a near-CD quality file format for sound files, and is very popular for music on the web.

It's becoming more popular as people use it to swap music online because of its powerful compression.

For example, you can get hundreds of songs on a single CD using the MP3 format.

MP3 is a digital music format which allows CD tracks to be reduced to around a tenth of their normal size without a significant loss of quality.

This means that for the first time it's become practical to make music available for download over the Internet as download times have been drastically cut.

MP3 strips out a lot of the information recorded in a song that our ears aren't able to hear and uses complicated maths to reduce the file size.

The most popular CODEC (for compressor-decompressor) software that shrinks music into digital files small enough for transmission over the Internet. The MP3 format strips away layers of inaudible sounds, compresses what is left, then decompresses those same files for listening on a computer or audio player. MP3 is "open source" software, in the public domain and freely available on the Internet.
 www.wipo.org/about-wipo/en/info_center/digital_age/glossary.htm

What is AAC?

It stands for Advanced Audio Coding and it offers better compression and better sound quality than MP3. Like MP3, it is a form of lossy compression. This means that certain frequencies of sound are eliminated during the encoding process. But don't worry too much about this. AAC encoding is generally regarded as producing very good results.
AAC supports wide range of sampling rates (8 to 96kHz), 48 audio channels, 15 auxiliary low-frequency enhancement channels and up to 15 embedded data streams. The format supports bit-rates from 8kbps to 320kbps.

MPEG-2 AAC evolved out of a search for an efficient coding method for surround sound signals. a2b music and Liquid Audio are delivery systems based on AAC. Widespread use of AAC, similar to that of MP3, is not anticipated due to high licensing costs which make software development an expensive prospect.

What is MPEG-2 AAC?

MPEG Advanced Audio Coding (AAC), also known as MPEG-2 NBC (Non-Backward Compatible) represents the actual state of the art in natural audio coding.
It is able to handle a lot more channels than MP2 or MP3 (48 full audio channels and 16 low frequency enhancement ones compared to 5 full audio channels and 1 low frequency enhancement one for MP2 or MP3), and it can handle higher sampling frequencies than MP3 (up to 96kHz compared to 48kHz). MPEG formal listening tests have demonstrated that for 2 channels it is able to provide slightly better audio quality at 96 kb/s than layer-3 at 128 kb/s or layer-2 at 192 kb/s.

What can you use Podcasts for?

Recording anything of interest. Used widely for recording presentations at conferences, for news items, for music, video and stories.

In education they are a very useful student resource especially if lectures, practical sessions, tutorials, seminars and revision notes etc are recorded and made available as podcasts. Students can download, listen/watch from wherever and whenever they like.

How can you create a Podcast?

http://www.how-to-podcast-tutorial.com/00-podcast-tutorial-four-ps.htm

You can very quickly create a podcast either as an audio or video file by using Quicktime Pro and iTunes

What do you need?

Hardware

A simple podcast can be recorded directly into an iPod with a microphone adaptor. However, you will most likely want to do some basic editing of your podcast, so recording your podcast on a computer allows for the most flexibility in editing.

For computer-based recording you will need:

Quality microphone

Pop Guard

(Pop Guards: "Popping" is the unwanted noise which sometimes occurs when the subject makes a sudden forceful sound such as "P". It happens because this particular vocalisation forces a large amount of air into the microphone. Obviously it is more of a problem when the subject is very close to the mic.
One solution is to place a pop guard (AKA pop filter) between the subject and the mic. This acts as a barrier and absorbs most of the excess air pressure.

You can make an effective pop guard out of a wire circle and nylon.
Audio interface for your computer (built in hardware is usually low quality))

A computer
Software
Headphones

Microphones are an essential device for recording audio and converting acoustic signals into electrical signals that are then converted to digital words for manipulation by a computer.

Appropriate choice of microphone type, and microphone placement, will ensure the best reproduction of the sound. A manufacturer of cost-effective quality microphones is Rode (*http://www.rode.com.au*).

Software

Audio recording and editing software comes in a range of complexities and prices! This is also the area of most divergence between the Mac and PC platforms, as there are great software solutions that run only on one or other platform.

The following is a suggested list of software for recording/editing for Mac, PC, and both.

Recording/editing software that works on both Mac & PC:

- Audacity (*http://audacity.sourceforge.net/*)
- QuickTime Pro (*http://www.apple.com/quicktime/tutorials/podcasting.html*)
- Cubase SX (*http://www.steinberg.de*)
- ProTools (*http://www.digidesign.com*)

Recommended recording/editing software that works only on Mac:
GarageBand (*http://www.apple.com/ilife/garageband/features/podcasts.html*)

- SoundTrack Pro
- Logic Express
- Logic Pro
- iMovie - for screencasts
- SnapzPro - for screencasts

 Recommended recording/editing software that works only on PC:

- PodcastStation (*http://www.podcaststation.com*)
- Adobe Audition (*http://www.adobe.com/products/audition/main.html*)
- Pinnacle Studio 10 - for screencasts

The quickest and simplest way to make a Podcast recording, either as an audio or as a video (vodcast), is to use Quick Time Pro and iTunes on the Macintosh.

Once recorded it can be edited and then shared through iTunes or uploaded to a Web hosting site.

Sharing and Hosting

iTunes and Quicktime

Apple's definitive Music/Video/Podcast application and video player. Both are available for free.

Download from the Apple site for the Macintosh and PC

http://www.apple.com

Podomatic

This site enables you to create, share and find podcasts

http://www.podomatic.com/

Odeo

http://odeo.com/

Similar in nature to Podomatic

"Over one million audio files—from podcasts and all over the web. Listen, download, subscribe...".

YouTube

Has probably become the most well known site for posting video and audio clips

http://www.youtube.com/

Another site to explore:

http://www.blip.tv

An example of Educational Podcasting

Purdue University (Indiana) has updated their system for distributing lectures to students, providing mp3 versions of introductory course lectures to students.

Benefits include

* provides a way for instructors to evaluate themselves
* students can review lecture materials later in the course
 * assists auditory and ESL learners.

Purdue has 55 classrooms capable of recording podcasts in 27 buildings across campus. They also have 17 other capable rooms (e.g. conference rooms) for recording other seminars like graduate student workshops. Their process is mostly automated.

The lecture is captured through a microphone and open phone line which transmit the lecture to realtime mp3 recorders. The mp3 recorders push the lectures to software that processes and uploads 3 file types (Real Audio stream, Windows Media stream, mp3 file) to the server. Lecture podcasts are typically available from the server within five minutes of a class ending.
Other Universities are beginning to follow Purdue's example.

Workshop outline:

0930	**Introduction to Workshop 1: Richard Elliott, Wintec**
	Social software and Web 2.0: brief overview from Thom Cochrane
0940	**Wikis and Blogs**
1030	**Podcasting**
1115	**Other applications of interest**
11 25	**Wind up**
1230	**Lunchtime presentation**

1330	**Introduction to Workshop 2: Richard Elliott, Wintec**
	Social software and Web 2.0: brief overview from Thom Cochrane
1340	**Wikis and Blogs**
1430	**Podcasting**
1515	**Other applications of interest**
15 25	**Wind up**

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