The law is continually under review, particularly in the area of new technologies and electronic data. JISC Legal monitors all such developments and reports back to the academic community via its website, printed publications, workshops, regular email newsletter and help-desk service. Other topics investigated this year include cybercrime, accessibility law and ISP liability. The JISC Legal website is at: http://www.jisclegal.ac.uk

Podcasting – putting the library back at the centre of learning

Heather Worlledge-Andrew
Faculty Support Team Leader for the Physical Sciences,
University of Glasgow
Tel: 0141 330 6722
E-mail: hwa@lib.gla.ac.uk

During the first three months of 2006 Glasgow University Library looked at the use of podcasting following a request from Joe Maguire, a final-year student who wanted to carry out a project to podcast a talk on how to gain entry to the building. The introduction of podcasting at Glasgow University has been a user-generated project developed with a user perspective from conception to end service.

Other factors were coming into play:

- Academic staff in subjects as diverse as psychology, philosophy, computing, veterinary medicine and dentistry were all using podcasts and online learning. As more students move to part-time, distance and evening classes we are being required to provide more flexible support at point of need. The university also plans to further increase the number of postgraduate students (PGs) we have, an area we already find difficult to support due to our current ratio of PGs to liaison librarians.

- Accessibility: students now use web 2.0 socio-collaborative technologies as a way of life and we need to key into their methods of working and how they run their daily routines rather than ask them to use older methodologies. The eventual aim is to have the library podcasts and other information sitting on their hand-held devices, being updated via Really Simple Syndication (RSS) feeds so they can call it up whenever they need to. Lecture podcasts, journal articles, library services will all be on their hand-held
device, accessible to them, fully interactive and available 24 hours a day, seven days a week.

- Accessibility: using these new technologies we can easily, simply and cheaply produce multiple versions of ours. The ease and simplicity of production reduce our overheads in the support of all library users. Interestingly, the majority of students prefer to use these new delivery methodologies.

In May of 2006 Joe and I submitted a project bid to the library management team for us to investigate the use of Web 2.0 technology to produce finished-product podcasts for the library. Once the project was approved we needed to address the practicalities of the equipment we had available to us. The university does have a large, professional media production unit and a full studio on campus. Discussions were had over the quality, speed of delivery and lifespan of the materials we were thinking of producing. The library is not MGM or Paramount. Weighing up the time scales, potential staff-time costs and the disengagement of the people developing the podcasts from the production of them it was decided that using the big studio would lose the point of utilising web 2.0 communication technologies. Using and being involved in the production of the script, production of the RSS feeds and playing with the recordings all served to increase staff enthusiasm towards the project and fire the imagination as to how these technologies might be used in other ways.

Examining the PCs the subject librarians had revealed they were of a high enough specification that it became feasible to download and use open-source software to record audio-only files, produce graphics, write an RSS feed and then upload the resulting podcast to the web. However, the main drawback was that it would be incredibly time-consuming to do enhanced podcasts using PC technology available at the time we used an Apple Mac and software called GarageBand to produce the enhanced (with images) podcasts. To produce the four-minute enhanced podcast using a Mac laptop took around an hour. To produce the same podcast using a PC would currently take a lot longer and required a much more detailed skill-set than was present amongst library staff. This may change in the future with the release of open-source software similar to that available for Macs but, as at March 2007, the only feasible solution seems to be to use GarageBand on a Mac. This software allows you to ‘bundle’ the images, audio and RSS feed into an .m4a format with an incredibly easy user-friendly interface. We used Audacity to record the vanilla, audio-only podcasts. Inkscape was used to produce the graphics and Notepad to write the RSS feeds. As an update, I have started discussions with our learning technology support unit who are currently investigating doing some work with the Audacity open-source software (OSS) in order to allow Flash to be used as a delivery method. They are also exploring whether a method for non-programmers exists to produce enhanced podcasts on a PC.

At the end of the project we had produced the following, in the three formats of vanilla podcasts, enhanced podcasts and interactive transcripts:

- a short Xpress tour – a four-minute podcast showing how to gain entry to the building and the main areas used during year one
- a longer Xtended tour – much more detailed 35-minute tour detailing library services and how to take advantage of them, touring students around all areas of the library and demonstrating how both subject information and physical materials are arranged in the building
- a law tour – introductory tour to the legal information materials and services, aimed at freshers
- a maps and official publications unit introductory tour – showing the facilities and services available to the general public as well as to Glasgow’s university community
- audio only – detailed library-guide episodes on, for example, how to find and borrow a book.

Our library community can access all of these as podcasts via various sites such as iTunes and PodcastAlley. Users can also access them as à la carte, static downloads onto their own hand-held devices, such as mobile phones, mp3 players or iPods. Finally library users can view them on a PC anywhere in the world using Quicktime. Transcripts are made available as web pages in an accessibility compliant format with dynamic linking to images mentioned within the transcript. Interestingly, we have had an e-mail from a deaf-blind member of academic staff at another institution who praised the text transcripts as she could output them on her Braille printer and still feel she was being made welcome.

A side-note on podcasts: a downloadable audio file is not a podcast. The distribution method that
accompanies it and that turns it into a podcast is something called an RSS feed.

What is an RSS feed? It is a bit of XML. What is XML, then? XML is a method of describing data such as images, words and files that describes the structure of the item. To use a librarianship analogy, it is similar to AACR2 cataloguing rules in that you can describe anything using XML. Once your item or data is XML-structured you can then share it across formats. RSS is a dynamic, distribution method based on this XML logic.

People subscribe to your RSS feed using what is known as an aggregator. This can be a free, web-based service such as Bloglines or PageFlakes or a commercial piece of software downloaded to and only accessible from your PC or Mac. Once people have subscribed, whenever you load a new version of a podcast, or an entirely new one, the user receives a short press release about it and a link to it in their aggregator without having to do anything. It is a constant and proactive current-awareness methodology similar to having a journal delivered to your home rather than having to visit the library or newsagents to read it.

Many commercial databases now use RSS to alert researchers to new documents in their area. For example if you carry out a search on the Compendex database via the Ei2 interface you can then save your search as an RSS feed. Now whenever Compendex adds new records it will look through them for ones that match your search strategy and send you a note of them. Another site that uses RSS extensively is the BBC website. However, the information delivered via RSS does not easily translate into EndNote or Reference Manager, a fact we advise our users on when they are saving searches.

By making the tours and other files available as podcasts by using an RSS feed we have a much more dynamic way of reaching our users than before. We integrate ourselves into what is called the users’ space, and the library becomes an involved partner and collaborates with the students to ensure they have the information they need readily to hand in an interactive fashion, offering what feels like a more individually personalised service. By using open standards and creative commons we are allowing the materials we have developed to be taken by our users, reconfigured and exploited in a way that suits their individual learning style and lifestyle. We are literally in their back pocket.

The whole ethos behind a lot of Web 2.0 social technology is that it is open, sharing and collaborative, with each person building on others’ experience and feeding it back into the system again. Increasingly with the advent of intranets and virtual learning environments (VLEs) we have seen the copyrighting of and restriction of access to library information skills materials so that we all spend more time reinventing the same wheel. One of the ideologies that both library and project staff at Glasgow had in producing these podcasts and the help screens behind them was that this would not be the case with the material we produced. If we had not used the creative commons licence and made our material freely available it would have partially defeated the open, sharing, social ethos of the Web 2.0 technologies.

Once we had produced these materials we were ready to trial them. I have a group of friends in the 17 to 20 year old age range and they agreed to trial the basic, first rough version of the four-minute tour. These were not university-level students but all had studied or were studying at further education level. Words they used when playing the podcast were ‘cool’, ‘interesting’, ‘helpful’, ‘supporting us in how we can do something rather than telling us how to do it’. This latter phase, in particular, seemed a sophisticated observation from a 17 year old and it caused me to reflect. Do we support students in what they perceive to be an autocratic way? Do we and our users see the difference between us being authoritative and not authoritarian?

By mid-August 2006 we were ready to trial our products more widely, and we selected a small group of English as a foreign language (EFL) students who would be coming to the university to study as PGs. They were asked whether they would like to take the tour with either a member of library staff or an iPod Nano. Project staff accompanied the Nano-tour students to observe their behaviour, provide help if it was required and gather feedback once the tour was complete. The tour took less time than a librarian-guided one.

Comments that the EFL students were asked to rate were:

- The tour was of a high quality.
- The tour was very useful and informative.
- The library should make more podcasts for students.
- The library should offer multiple languages.
- The library should offer subject specific tours.
The iPod was fun and simple to use.
We should offer downloads through the library website.
We should allow students to podcast about the library.

The boxes to tick were labelled ‘Definitely – Yes – Maybe – No’. All the responses fell into the first three, with most being in the first two categories, with the exception that multiple languages were not felt to be necessary. Students commented that the library podcasts were beneficial in helping them adjust to the pace and accent of Scottish English before having to attend formal classes at the university.

During the podcast project it was helpful, and almost unavoidable, to exploit other Web 2.0 technology. One such was the use of a photo-hosting site, Flickr. Searching on Flickr for Glasgow University Library yielded 112 images even before the project loaded any. Many were of high quality, taken by students and containing comments by other students. During the project we took over 600 images of the library building using a staff member’s digital camera. The library now has a public bank of images it can incorporate into any other work it does. They have already been used to demonstrate aspects of our building and services, both off-campus when staff attend conferences and on-campus to show students who drop into our offices how to use and where to find various materials and services. Students can’t comment on these images at the moment because we haven’t resolved the problem of who monitors it, but we hope to resolve this issue later in 2007. We can also use them to produce ‘photocasts’ of events, procedures or whatever we feel we’d like to be seen in the public domain.

YouTube, utilising Flash technology, is a free online video-streaming service that allows users to view and share videos that have been uploaded by people who have signed up for a free YouTube account. Video quality is poor due to file size and bandwidth issues but it is a big hit. Using the video facility on a digital camera it would be easy to do a quick video clip of a procedure (borrowing a book using a self-issue machine, for example) and load this up for students to see. The project staff member converted the short tour to a video and uploaded it. It has been viewed 575 times at the time of writing, despite not being formally indexed or advertised anywhere. Comments on it by YouTube users have included:

- ‘Something like that would have been really useful when I was at uni – our library was so huge – yours reminded me of it in parts and a tour like that would have been really beneficial. I liked the tone of the narrator – friendly, clear and the right amount of info too.’
- ‘I think it’s a great video and I wish that our Uni had something like it!’
- ‘It was very clear and looked as though it would be most helpful.’
- ‘It was a very clearly enunciated commentary and seemed to be comprehensive.’
- ‘Loved the style, didn’t watch all the way through cos i don’t need to know all the info but got the jist of it, fab idea and a lovely speaking voice.’

**Next steps**

The podcasts has been available for six months as of March 2007. Most students appear to access them via iTunes and the law tour was in the top twenty hits of the higher education sector for over eight weeks. Feedback has been positive from both students and library staff and the response has been such that we will be taking the podcasts from project to service during April to August 2007.

It is envisaged that these tours, both the generic and the subject-specific, may take over from many physical tours in September 2007. This will free staff to support students in a more specific and targeted way. The images on the Flickr account have been downloaded and used on library web pages. One of the problems raised by many of these new technologies is the fact that you are using a remote site with potentially different business ethics to those of an educational institution. They will almost definitely sell advertising space, so your users may see adverts for products they may feel are incompatible with higher education and if your users go hunting they may find ‘inappropriate’ material on these sites. None of the most popular Web 2.0 sites – such as Flickr, YouTube, MySpace – seem to pay much attention to accessibility legislation.

This leaves us with the question of how much we can use these services for our students. Perhaps the only solution is to ask technology-literate staff to assist us in hosting versions of the software on our institutional servers and working on the OSS to facilitate access to the contents by all of our users. This, however, puts us at a virtual distance from our users again, causing a disconnect.
between them and us and negating a major reason for our utilising Web 2.0 technology.

In GUL we are currently discussing what else we might make available as a podcast. Suggestions include:

- providing information to our users on changes to services and new services
- hosting interviews with managers of units or our Director of Service
- publicising our special collections book of the month
- having round tables on hot topics such as information literacy, research assessment exercise (REA) support, and
- with some trepidation but much enthusiasm, encouraging students to produce their own library podcasts.

If you are thinking of producing podcasts yourself there are a few challenges to consider first. We had to undergo a handbrake-turn change of perspective – the whole ethos of Library 2.0 is that the technologies are open and collaborative and that they positively encourage personalisation, critique and the embedding of themselves into the daily lives of users. By making use of these technologies we make ourselves more a part of people’s daily lives than we have ever been before. We must accelerate our pace of change: many students would consider a Web 2.0 technology that was more than six months of age as being outdated. We need to be making use of these technologies ourselves in order to immerse ourselves in what, to my generation, is a rather foreign and occasionally intimidating world. We will be more open to critique and comment, and must be more willing to receive that and take it on board. My experience during the project has been that I must keep an open mind, a poker face and allow library users to drive the services in a much faster and more dynamic way than has been done previously.

Finally it is important to note that this new technology is a means to an end; it is not the end in itself. Web 2.0 gives us a glimpse of how social interaction and networking take place in certain areas of today’s society and also gives us the opportunity to engage and interact with our users in a totally different way than we have done before, neatly solving some staffing, accessibility and availability issues along the way. However, it is important that we maintain the quality level of the end product and ensure that what we are producing is seen as relevant and of use to our user community. The medium grabs their attention, but it is the content that has to hold it.

To explore the whole issue of podcasts, what they are and how you can start making them, a few references are given below.

**NOTE**

The author wishes to express her profound thanks to Joe Maguire for his work on the project and for his help in putting this article together.

**References**


Explanations of RSS vocabulary and functionality are available from the BBC website http://news.bbc.co.uk/1/hi/help/rss/3223484.stm and from Wikipedia at http://en.wikipedia.org/wiki/RSS_(file_format)

Jake Lundington’s MediaBlab, ‘Recording a podcast’: http://www.jakeludington.com/podcasting/20050222_recording_a_podcast.html

Services mentioned in this document are also available online:

- Flickr – http://www.flickr.com
- YouTube – http://www.youtube.com
- Audacity – http://audacity.sourceforge.net/
- Inkscape – http://inkscape.org/