

Subscribe Now: Podcast Technology and the Study of Law

Wayne Rumbles

School of Law, University of Waikato, New Zealand

Email: wayner@waikato.ac.nz

Introduction

I have been running a podcasting trial over the last three teaching periods, in both the undergraduate 4th year option, Law and Information Technology and the Law and IT graduate research focused paper at the School of Law, University of Waikato.

In these courses my interest was to explore the interchange between the Internet and law, in terms of research, theory and substantive legal regulation. The subject of legal inquiry was the Internet and its associated technologies, which provided a unique opportunity to bring the subject of the paper into the classroom (and homes of the students) combining both technologically mediated modes of learning with the more traditional face to face modes.¹

The Law and Information Technology paper aims to:

- Enable students to describe and critically analyse laws regulating the Internet;
- To further develop critical use of the internet as a research tool;
- Enable students to understand the issues and concepts behind the ongoing development of internet regulation;
- To facilitate the use of electronic media to support presentation of ideas
- Enable students to develop a deeper understanding in a chosen area relating to information technology and law;
- Enable students to participate in an interactive online-learning environment;
- Give the students an opportunity to gain some knowledge of the IT issues which face lawyers;
- To explicitly give the students an opportunity to be producers of knowledge

The paper already included a web based learning environment including lecture notes/slides, class notices, graded asynchronous discussion (student were split into groups). Problem based assessment using fictitious e-commerce website evaluation, collaborative research links creation -- this was delivered through the university new portal system which creates customised interfaces for each student based on preselected preferences – papers enrolled in and permissions/access granted.

1. Background

Along side teaching a group of senior law students who were interested in technology and its impact on law²; my attention was pricked by the phenomena of the podcast. This led to inquiry into how these might be able to be used in the teaching of these papers.³ Initially the University of Waikato's IT Department rejected the proposal to purchase the hardware and

¹ See Oblinger, Dianna "Learners, Learning and Technology" Educse review (Sept/Oct 2005) 66-75 for a general discussion on learners and technology

² Ibid at 69. Not all students were net generation or digital natives but all had an interest in technology.

³ This was against a background of developments mainly in US Universities – especially the highly publicised Duke University trial in 2004-2005. see Duke University (2005). Duke iPod first year experience. <http://www.duke.edu/ipod/> [viewed 30 Apr 2005].

software needed to facilitate the integration of podcasts into the course.⁴ After some persistence the proposal was eventually accepted in late 2005.

1.1 What is podcasting

Podcasting is a means of distributing audio and video programs via the Internet that lets users subscribe to a number of files, also known as "feeds", and then hear or view the material at the time that they choose.

"Podcasting" is distinct from other types of online media delivery because of its subscription model, rather than one-time delivery. A series of files are delivered because subscribers want to get the information regularly.

Vodcasting is a way of packaging a video presentation in a easy downloadable form., using the same subscription model as podcasting.

While there has been some discussion about the name podcasting as it seems to suggest that somehow podcasting is linked to apple's ipod and Professor Jonathan Sterne (audio historian) prefers the term broadcast drawing on its agricultural roots in that information (like seed) is cast out over a wide area and you wait to see which will grow and which wont or which will be picked up by users and which wont. I will use the term podcasting for this paper as broadcasting does now (as Sterne acknowledges) carries with it a host of associated conceptual ideas such as ownership and regulation of spectrum a commercial model of broadcast supported by advertising and constant broadcast of material supplied by a few dominant media organizations.⁵ In many ways podcasts can be narrowcast; the podcasts that were used in the Law and IT papers were targeted at a two small groups totalling 50 students – and as will be later discussed these have even narrowed so the podcast can have an audience of one.

What podcasts do is allow content: audio; audio tied to graphics hyperlinks and text; or video to be packaged in such a way as to be easily deliverable on the internet. This is achieved by a simple (and not so new technology) called RSS (really simple syndication⁶) this allows a person or in this case a student to subscribe to a particular feed and then automatically be delivered any new content added to that feed. They then can listen or watch that information on their computer or media device (including an ipod) when ever and where ever they choose. Radio, radio with pictures and TV on demand in your pocket if you like.

Although as mentioned much of the technology is not new what is new is the combination of these technologies with increasing broadband and the pervasive distribution of personal media devices like the ipod. The podcast phenomena has grown exponentially and now there are thousands and thousands of podcasts on virtually any subject you can think⁷.

The software used to create these has become more user friendly and the hardware is almost any recent computer and a headset or microphone. Therefore virtually anyone with a little knowledge and the hardware can create their own podcast. Although as Foster points out even though podcasts are held up be a disruptive technology allowing the identities and material that have been overlooked by big government, big business and other media however the actual dominant voice in this technology is very much a middle class, masculine

⁴ The IT department (who control all technology purchases for the university) –saw the use of ipods as luxury items and therefore fell outside the rationalisation of resources which drove the procurement policies .

⁵ See Sterne, J, "*From Broad to Pod: Histories of Transmission for the Digital Age*" paper presented at the Duke University Podcasting Symposium September 27 - 28, 2005, Podcasts and webcasts of this and other papers can be accessed at <http://isis.duke.edu/events/podcasting/>

⁶ See Wikipedia for a more detailed definition and elaboration of what the initials RSS stand for. <http://en.wikipedia.org/wiki/RSS>

⁷ A quick search of Google answers gives estimates of around 61 million podcasts in 2005 and 266 million in March 2006. these statistics are probably highly inaccurate and out of date - but what is clear is the exponential growth of podcast media. For a discussion of the history of podcasts see Hargis, J., Ph.D., and Wilson, D. "Fishing for learning with a podcast net", from <http://www.unf.edu/dept/cirt/tech/podcast/HargisPodcastArticle.pdf>

and white American voice. Therefore the technology itself needs some management in terms of an educational device to avoid the reinscribing of hegemonic voices rather than an opportunity to allow the development of alternative perspectives.⁸

2. Podlaw: The Proposal

2.1 The Law and IT proposal involved three parts:

The proposal submitted to the Dean of the law school and to Information Technology Services (ITS) of the University was that:

1. Selected students would deliver their presentations via enhanced podcasts
2. Some lecture content would be presented as enhanced podcasts
3. Some optional lecturer information would be presented via Vodcast.

However as the papers unfolded and the lecturer and the students became more familiar with the technology the following were added:

4. Highlights from the lectures
5. Discussion and clarifications of assessments
6. One on one video feedback for students unable to meet with me in person.
7. Additional materials – topical discussions – interesting material that came to my attention – news items.

Overall the proposal was a little more modest than the Duke example with an investment of around \$2500 NZ including a small pool of 6 ipod used on a temporary loan system.⁹

Students could access the information in various ways

1. There were two computers in a study room set up with itunes which was automatically subscribed to the papers' podcasts – students could book these rooms to either upload the material to their own ipod, phone or media device or use a headset and listen to them on the computer.
2. They could subscribe to the podcasts and download them to their computers or media device at home
3. They could loan one of the 6 pre loaded ipods from me for a set amount of time

2.2 Benefits/ justifications of the proposal:

It was recommended that students used iTunes to view and listen to podcasts. The reason for this is free and will run across platforms (i.e. PC, Apple, Linux etc ¹⁰ This meant that it was available to all students and could be installed on University machines.

The use of podcast presentation was a way to achieve a balance between use of class time for content and the pedagogical benefits of oral/electronic presentation for senior law students.

The Law and Information Technology paper is already a blended delivery paper (both electronic and face to face) See <http://www.waikato.ac.nz/law/online/infotech/>, this is just an extension of the delivery mode. The introduction and use of podcasting in the teaching of law students allows for research in the area of teaching technology.

Podcasting has marketing benefits of using cutting edge technology and innovative teaching techniques.

⁸ Foster, D as part of the Performance and Identity Panel at the Duke University Podcasting Symposium September 27 - 28, 2005, Podcasts and webcasts of this and other papers can be accessed at <http://isis.duke.edu/events/podcasting/>

⁹ Supra n 3

¹⁰ The podcasts could be viewed within the website with a free Quicktime plugin as long as the browser was relatively recent - however this did not allow for any control of the size of the image. The iTunes software does allow some control over the size of the graphics and has an easy navigation interface.

This would also be used in the Law and IT masters class in A semester 2006. I had a very capable student who wished to take the Law and IT paper while on the student exchange in Belgium, the use of podcasting allowed her to participate in the class to some extent and do her presentation remotely.

The Waikato Law School attracts large numbers of non-traditional law students (where traditional appears to be defined as white middle class male school leavers). For 2000, the breakdown of non-traditional students admitted was 28.7% Maori (indigenous), 30% mature (over 30 years of age) and 63% women.¹¹ As is true of many other countries, there has been a shift in model of governance of higher education in New Zealand, characterised by a move from state funded to user pays education.¹² The combination of non-traditional students, rising fees, student loans and the requirement that students carry out a full time programme of study to access what support is available has lead to increased pressure on students. According to research many students do better when exposed to student centred electronic delivery.¹³

As Migdal and Cartwright point out

Of course, for some time now there have been such significant financial and domestic demands on students, that it is doubtful whether there is such a thing as a "full-time" student. It may well be, therefore, that the improved performance of the apparently weaker student is attributable to the accessibility of teaching and learning materials - attendance at face-to-face lectures and visits to the library that would otherwise clash with work/domestic demands are available electronically on demand.¹⁴

Part of the motivation behind the e-delivery components of the Law and IT paper was to provide the opportunity for as many students to succeed in this paper as possible.¹⁵ Students do miss lectures and we need to encourage these students to complete and continue in the degree. There is a growing university and governmental concern with retention (in fact we will receive some of funding dependent on retention rates) within universities.¹⁶

3. Podlaw: The Application

3.1 Lecture or CourseCast

For the masters class, the whole of the lectures were podcasted, mainly for the student undertaking the paper from Belgium. Many people worry that if you record your lecturers or course cast that no one will come to class, however as Professor Marc Loudon of Medicinal Chemistry at Purdue University says "If a podcast can capture everything you do in class, you deserve to have nobody coming"¹⁷

There did not appear to be any major differences in attendance from pre podcast and podcast delivery. Attendance in class is not required and like any other year attendance was irregular with significant decrease in numbers around assessments.¹⁸ The reality was that most

¹¹ Minutes, School of Law Board of Studies, March 2000.

¹² Marginson, S., Education and public policy in Australia, xv, 286 pp., Cambridge University Press, Cambridge, 1993.

¹³ Migdal, S., and M. Cartwright, Electronic Delivery in Law: What difference does it make to results? in *Web Journal of Current Legal Issues*, 2000.

¹⁴ Ibid.

¹⁵ The measure for how the well or otherwise students will need analysis at the end of the year when all the fourth year papers are complete.

¹⁶ See Tertiary Education Advisory Commission, "Shaping the Funding Framework" (Wellington, 2001) which can be accessed at <http://www.tec.govt.nz/upload/downloads/tertiary-education-advisory-commission-report-4.pdf>

¹⁷ Brock read, "Lectures on the Go" The Chronicle of Higher Education" <http://chronical.com/free/v52/i10/10a03901.htm> (28 October 2005)

¹⁸ For general discussion see Shannon, C. "Why Don't Studnets Attend Lectures and What Can be done about it through using Ipod Nanaos? Paper Presented st the 23rd Annual Ascilite Conference (Sydney, 2006) and Carr, S. (2000, February 11). As distance education comes of age, the challenge is

students did not listen to the full lecture podcasts unless they missed a lecture with the exception of the one totally distant student in Belgium. In contrast most downloaded the lecture highlights, assessment discussions and extra material.

3.1.1 White Noise

This is understandable. My lectures at this level are full of interruptions: from the students asking questions, raising points of discussion or making connections to previous knowledge; and from the lecturer posing questions to the students, breaking the students into quick fire small group discussions. This type of lecture/performance is not easily captured by podcast technology and the recording system does not clearly capture questions from the students. Therefore unedited lectures may have up to 20 minutes in the hour of white noise that elongate the podcast without adding value.

3.2 Highlights

A much more effective way to use the podcasts is to either edit the original 50 or 100 minutes considerably to leave highlights, difficult areas and perhaps further discussion on topics. For the undergraduate Law and Information Technology paper only highlights from the lectures clarifying main points and issues were podcast. These were well used (at least downloaded) by about 90% of students downloading at least some of the highlights.

3.3 Extra materials

This podcast feed developed as the papers ran, I would discuss topical issues that related to our paper as they came up and were developed – these podcasts were linked to asynchronous discussion—in which the students could contribute. While there was a subscription rate of over 75% of students the discussion participation was variable as there was not assessment attached – but there was up take with the masters paper.

3.4 Assessment

For each piece of assessment I have a class discussion, the instructions and main question arising out of these discussions were podcast. There was almost 100% subscription to the assessment podcasts.¹⁹

3.5 Presentations – student generated content

By far the most exciting use of the technology was the students producing content – for the paper in general and in developing the use of podcasts as part of the student generated content I drew on the ideas of cognitive flexibility theory expounded by Spiro et al²⁰

“By cognitive flexibility, we mean the ability to spontaneously restructure one's knowledge, in many ways, in adaptive response to radically changing situational demands...²¹” This is I suggest what we do or should be training our law students to do

keeping the students. The Chronicle of Higher Education, A39–A49. Retrieved June 6, 2005, from <http://chronicle.com/prm/weekly/v46/i23/23a00101.htm>

¹⁹ This result is supported by a similar trend noted in Chan, A., Lee, M. and McLoughlin, C. “Everyone's Learning with Podcasting: A Charles Sturt University Experience” Proceedings of the 23rd Annual ASCILITE conference (Sydney, 2005).

²⁰ For general discussion see Spiro, R., Feltovich, P., Jacobson, M., & Coulson, R. (1991b). Knowledge representation, content specification, and the development of skill in situation-specific knowledge assembly: Some constructivist issues as they relate to cognitive flexibility theory and hypertext. *Educational Technology*, 31(9), 22-25. Also appears in T. M. Duffy & D. H. Jonassen (Eds.), *Constructivism and the technology of instruction: A conversation* (pp. 121-128). Hillsdale, NJ: Lawrence Erlbaum Associates.

²¹ Spiro, R., & Jehng, J-C. (1990). Cognitive flexibility and hypertext: Theory and technology for the nonlinear and multidimensional traversal of complex subject matter. In D. Nix & R. Spiro (Eds.), *Cognition, education, and multimedia: Exploring ideas in high technology* (pp. 163-205). Hillsdale, NJ: Lawrence Erlbaum Associates at 165.

The theory is largely concerned with transfer of knowledge and skills beyond their initial learning situation. We can help our students to develop cognitive flexibility by exposing them to multiple conceptual representations of knowledge and giving them diverse and novel opportunities to apply and integrate that knowledge.

The theory has these four principles:

1. Learning activities must provide multiple representations of content.
2. Instructional materials should avoid oversimplifying the content domain and support context-dependent knowledge.
3. Instruction should be case-based and emphasize knowledge construction, not transmission of information.
4. Knowledge sources should be highly interconnected rather than compartmentalized.²²

The law and information Technology papers are taught at senior law student level. Teaching at this level in this type of paper offers some advantages in applying this theory. Law and IT is an application paper, it draws on existing knowledge of the students from the areas of criminal law, torts, contracts and intellectual property and applies these to novel situations. Because of this, it leave some space to explore the technologies that are a topic of discussion.

Indeed one of the major applications of intellectual property is digital entertainment being driven by technologies like ipods and digital media players, podcasts and peer to peer software. In creating their own podcasts the students can see the ease of creating and distributing content. However those students who created material also are then required to consider what they want people (in this case the other students) to do with their material. They in effect have to decide how do they want to regulate their intellectual property. The podcasters have to at a minimum, allow other students to view the material, but I get them to consider things like:

- Do they want to allow students to download and keep the material?
- Do they want to allow others to make further copies?
- Do they wish to allow the lecturer to use them in presentations such or for future years students?

In this way not only does the exercise of production of content encourage deep learning in their chosen topic it also gets them applying aspects of intellectual property licensing.

Both papers and especially the master level paper have an emphasis on presentation of research to their peers. These are then peer assessed and the student marks are combined with the lecturer marks to give them a total grade for the presentation. This peer assessment included comments and feedback from their fellow students which are then aggregated given back to the student. Students have indicated that will put more effort into an assignment (in this case their research project presentations) if they have to present these to their peers, this then generally flows on to the quality of their final research paper.²³

Oral presentations provide both skill and content acquisition, for law students it is an essential skill for their future careers. However these presentations are very time consuming and

²² For a summary see "Cognitive Flexibility Theory" in the Explorations in Learning & Instruction: The Theory Into Practice Database: <http://tip.psychology.org/spiro.html>

²³ See Daniel, R. "Peer assessment in musical performance: the development, trial and evaluation of a methodology for the Australian tertiary environment" British Journal of Music Education (2004), 21: 89-110 Cambridge University Press pp 90-93 for a general discussion although the specific example in this article is related to Music assessment a similar approach was used in the Law and Information Technology Paper.

produces timetabling problems when you have a large class and/or are teaching in a compressed timeframe such as summer school.

The creation of student podcasts were a tool to moderate these time issues but also provided a highly useful learning tool for those students who created the content. The students were able to self select doing their presentation either in the usual way in front of the class using PowerPoint or by podcast which would be uploaded to the class portal and viewed by their peers. I assumed that this would attract those students whom Dr Mark Taylor calls the post-modern university student, generation NeXt or digital natives – those students that have grown up with digital technology and are used to a high level of interactivity with the content; the bloggers that chatroom junkies; the mashers of digital content.²⁴ Generation NeXt students only accounted for half of the volunteers, the others included some students who were not familiar with the technology but wanted to extend their skills, a couple of mature students who because of work commitments preferred the flexible timing of delivering the presentation although as one of them stated that the “technology scared her”. There were also a few students who hated presenting in front of people but felt the asynchronous nature of the presentation of the material and the peer review/view relieved some of their anxieties.

The actual production of the podcast took about 30 minutes the students made an appointment with our computer consultant and he took them through the software interface.²⁵ All students were able to master the software within a very short space of time. Only one student didn't enjoy the process, because she believed the computer didn't like her, however the process was useful for her timetabling and work commitments.

All the students agreed that because the podcast had an enduring quality that could be reviewed by their peers, they had a desire produce a higher quality presentation than they would have otherwise. Most students recognised that they had developed a deeper understanding of their topic due to the increased effort. It is difficult to measure whether the production of podcasts had an effect on the actual grade achieved, most of those students who choose to produce a podcast presentation achieved in the upper 25 percent of the class in terms of grades for the final research paper.

3.6 Extreme narrow cast

In the masters papers I have individual meetings to give face to face feedback on the research project drafts and proposals. The fact that we had a student doing the paper while on an University exchange programme in Belgium, provided the catalyst for a idea that seems so simple now. That idea was to create a video podcast with a subscriber of one.

In that way she was able to given personalised feedback through her own vodcast – I used a high quality webcam to capture the video and some simple software iVeSeen to convert it vodcast. In a face to face discussion of research projects I draw diagrams of how the parts of their research fit together (or not) in the vodcast I was able to splice these diagrams into the video. The students said they preferred this feedback to a long email. I was able to upload this to a server for the students to download when they could.

3.7 One step beyond: Live Interactive podcasting?

As stated presentations form an essential part of both papers. The Student in Belgium provided a challenge as we did not have a computer consultant there or the hardware . My initial plan for my student in Belgium was her to do her presentation by podcast which she did for her first seminar. And then questions and comments were posted in the class asynchronous chat area in order for her to respond.

However the student herself suggested that we use video Skype -- which she had been using to keep in touch with her husband her in NZ in order for her respond to comments, questions

²⁴ Taylor, M. “Generation NeXt Comes to College” in A Collection of Papers on Self-Study and Institutional Improvement, (Higher Learning Commission of the North Central Association of Colleges and Schools, 2006)

²⁵ This was in addition to the production of the PowerPoint slides and research for the presentation.

and issues raised by the students. Therefore we combined a display of her presentation by podcast with a live video feed from Belgium.

It was suggested that could have used the university's dedicated video conferencing high quality feed. However compatible technology would be needed at the other end and the feed is charged per MB of traffic, and it was 5:00am in Belgium at the time of the presentations. Even if she could access to an endpoint with the right technology it is unlikely she would have access at 5:00am and we had a budget of approximately \$0. The podcast and skype feed were technologies which we could both easily set up -- as long as we both had broadband access it was free and simple.

The presentation and discussion went without a hitch. Both the presenter and the class could see and hear each other through the use of webcams at both endpoints, strengthening the sense of inclusion and interaction. The video quality was reasonable and sound very good. Both the presenter and the class responded positively to the experience.

4. Some tentative conclusions

While both the technology and its use in our school are in the an early stage a few tentative conclusions can be extracted.

Podcast technology is still developing and we will see a further development in ease of creation and distribution tools. This year has seen the development of third party high quality stereo recording devices for 5th generation IPods, enabling the class iPods to be used as recording devices for the audio for the presentation. Enabling a simpler method of podcast production.²⁶

While the recording and unedited distribution of lecture content is the easiest application of podcast technology, for our purposes this has a limited use as catch up for missed lectures or for distant students. However full coursecast does miss much of the interaction in class, and is elongated due to white noise.

Edited highlights and extra material was far more useful to the students as evidenced by the uptake rates. In the undergraduate Law and Information Technology paper, online content does replace some lectures, this includes not only podcasts but web resources textual notes and asynchronous discussions. Therefore it becomes another tool to engage students. Podcasts can add to our tools to deliver content but I don't believe they are either the end of the face to face lecture or the total package.

The use of extreme narrow cast worked well and was a easy form of delivery of feedback to individual students or groups of students who were unable to meet face to face. The use of video and graphics while bandwidth intensive does give the student a personalised interaction and a sense of belonging to the class.

The greatest potential of the podcast technology is in drawing students into creating content -- to move them from passive information eaters (some nibblers other gulpers) to information generators to even take some of those skills beyond the university and create their own podcast feeds.

The blending of technologies such as podcasts (itself a blend) and Skype will continue to give rise to new ways to deliver and receive knowledge. It is this mashing of technologies which engages the increasingly technoliterate generation NeXt students. But as Chan eludes the, use of technology for technology's sake is an empty if not glittery prize. The use of teaching technologies needs to be underpinned by sound pedagogical practices.²⁷

²⁶ Such devices as Griffin iTalk pro allow the audio can be produced for each slide on the iPod, and then all the student needs to do is supply the PowerPoint slides and these can be combined in the software.

²⁷ Supra n19 at 118-119.