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PODCASTING AS AN EDUCATIONAL BUILDING BLOCK IN ACADEMIC LIBRARIES

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Podcasting has taken off in leaps and bounds, having been adopted by many groups for many different purposes from disseminating television programs to making university lectures available. The popularity of podcasting inspired Curtin University Library to develop its own podcast series at the end of 2005. This paper indicates the success of this series to date and demonstrates how podcasts can effectively cater for today's learning styles, how they can benefit distance education and offshore students, and how they have evolved into useful educational tools in the twenty-first century.

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In 2004 the term *podcasting* entered our language. It is 'an amalgamation of two other words: *iPod*, the popular digital music player from Apple, and broadcasting'.¹ Podcasts, however, are not limited to being played on iPods; they can be played on any MP3 player or on any mobile phone with MP3 capability, as well as on a personal computer. This means that podcasts are a very adaptable and convenient medium. What actually makes an MP3 file a podcast is the availability and functionality of an RSS (Really Simple Syndication) feed which enables a user to subscribe to a podcast series. Subscribing facilitates the automatic download of newly released podcasts to the user's RSS reader of choice, of which there are many freely available on the Internet. The podcast can either be transferred to an MP3 player, such as an iPod, or listened to on a computer.²

One of the contributing factors to the success of podcasting is the enthusiastic adoption of MP3 players. Their popularity in Australia is demonstrated not only by anecdotal evidence but also by rapidly increasing sales figures of digital music players, including MP3 players. According to the Canon Digital Lifestyle Index, in 2006 almost two and a half million digital media players were sold in Australia, totalling \$316 million in value. In fact, spending on digital media players accounted for 12.7% of the sales of all digital electronic devices.

Digital media player penetration (1 per 3.2 adults) has been astonishing given how recent their introduction, yet the per capita spend is relatively low (\$75.51 per adult Australian), indicating the extent and speed with which average prices have fallen ... As a consequence, most digital devices have become attainable for a whole segment of the population who previously could not easily have afforded them.³

Digital media players have truly penetrated the Australian market and are now commonplace in the Australian digital lifestyle.

PODCASTING IN HIGHER EDUCATION

There is immense educational value in podcasting and this is recognised in teaching practice. As Maag notes, 'Many innovative teachers and students have unearthed an assortment of educational uses for MP3 devices'.⁴ This recognition has brought change to the education realm and is influencing education delivery methods. It is this delivery of instructional content that makes podcasting a popular tool in higher education. Podcasts have evolved in response to evolution in education: 'Students and educators alike have become more sophisticated ... Podcasts are simple, effective, dynamic tools that will change the way that students and educators interact in the classroom and in cyberspace'.⁵

The unique educational advantages that this new technology can deliver drive their rapid adoption. One of these advantages is the way it enhances the process of 'chunking' information to assist in information processing:

Podcasting can promise a unique approach to improving foundational pedagogical approaches to information processing and conceptual learning. Conceptual learning is contextual, relevant, holistic and at times requires intentional gaps. A major strategy for transferring information from short term to long term memory includes a conceptual learning phase, commonly called 'chunking'. Humans classify and gather several ideas or concepts together, make sense of them and then, search for connections to fully construct ideas and impressions.⁶

Information in a podcast can be presented in a 'conversation style' which has its own unique benefits. Blogger and media consultant Amy Gahrn described one of these: 'One advantage of podcasting is that sometimes complex topics become more comprehensible and resonant when explained in a human voice, rather

than by text ...the human voice can be incredibly powerful and effective'.⁷ A comment received in response to Gahrn's post supports this: 'I find that the content tends to hang with me longer when I've heard it, rather than read it, and I seem to integrate it better. Thousands of years of oral tradition can't be wrong, I guess'.⁸ Another advantage of using podcasting in education is the simplicity of the technology. Its educational value is enhanced by 'the easy transmission of information, the simple delivery process, and more use of MP3 players'.⁹

Podcasting complements current teaching and learning foundations, and supports future directions of educational delivery. As Campbell notes, 'Those of us in higher education owe it to our students to bring podcasting and other rich media into our courses so that they can lift their learning to a whole new level too'.¹⁰

IMPACT ON ACADEMIC LIBRARIES

Podcasting has been rapidly adopted in university courses but its uptake by libraries, especially within universities, has been slower. Libraries have been making use of podcasts to promote services and provide basic instruction in using library resources. DeVoe asks what role the library can play in the light of increasing use of podcasting by universities to deliver course materials and suggests that one of its most useful applications for all libraries would be an audio library tour.¹¹ Podcasting offers exciting opportunities for libraries to engage their users in a new and popular way. It can break down barriers, alleviate stress or anxiety students may have about using the library and give a friendly face to the library.¹² Libraries can make use of the popularity of podcasting and use it as a method for disseminating information to its wider community.¹³ 'As blogger Dave Jennings noted, 'it's doing for audio what blogs did for text',¹⁴ making this an opportune time for libraries to get on board.

Podcasting library information reduces dependence on the location and opening hours of a library. The mobility of technology today has shifted the focus from the physical library building and students no longer view visiting the library building itself as essential, because they can access information using a variety of technologies and devices such as their mobile phones and PDAs.¹⁵ Podcasts are another medium that allows students to access library information without having to physically come to the library. According to Baird and Fisher, new technologies allow the learning styles of Millennial students to be nurtured and provide more learning opportunities for these students without tying them to a physical space such as a library building.¹⁶ Students themselves embrace mobility in their learning and, therefore, embrace opportunities to access information remotely at any time.¹⁷

It has long been evident that libraries must embrace emerging technologies if they are going to stay in touch with new generations of learners and deliver information in new and flexible ways. It is important that libraries update their learning tools as technologies evolve to ensure that there is no risk of their becoming archaic and obsolete. All libraries need to stay relevant and to keep

up with the latest technologies, in order to stay in touch with their client base and to provide access to library information in new formats. By embracing new technologies and ideas, academic libraries can capture the interest of their student client base and impart valuable information skills that can be used beyond university study.

As emerging technologies continue to develop, it is important to be aware of the dangers of using technologies just for the sake of it and to base their adoption on the underlying learning benefit to or enhancement of users' experience. There must be a fundamental purpose that relates to how it can complement other resources and help students to use the library.¹⁸

Curtin University Library saw an underlying learning benefit in incorporating podcasting into its information literacy services. It could see how podcasting could cater for different learning styles and how it could enhance the educational experience of Curtin's distance education and offshore students and bring benefits compatible with the expectations of Millennial students.

Catering for Different Learning Styles

In designing instructional content it is important to consider all learning styles. Kaplan-Leiserson has found that podcasts offer 'greater student engagement and interest, and enhanced support for individual learning preferences and needs'.¹⁹ The nature of podcasts makes them a useful learning tool for the auditory learner who prefers to learn through listening rather than reading large chunks of text. 'For these learners, written information may have little meaning until it is heard'.²⁰

Audio in the form of podcasts may also have some pedagogical value for those studying English as a second language (ESL) and for international students with basic English language skills. The ability to replay a podcast over and over again allows students to learn at their own pace, giving them time to process the information they have heard. Thus it can be an aid for comprehension and understanding.²¹ This supports other learning styles too and can benefit students with learning disabilities. Listening to a librarian sitting behind a desk may be difficult for these groups of students whereas it is easy for them to reinforce their understanding by replaying and reviewing recordings.

Chan and Lee note that it has often been argued that simply listening to information does not equate to learning that same information.²² Campbell, however, notes that listening is active, not passive, and that the 'explaining voice' can lead to understanding.²³ The learning experience can, therefore, be improved by the use of audio formats. Audio formats such as podcasts can provide the greatest value when the information they present is not too detailed or complex. If too much concentration is required on the part of the listener, the pedagogical value may be diminished.²⁴

Enhancing the Experience of Distance Education

Given the current levels of student mobility and the nature of the lifestyles of many students today, distance education is a popular choice for many. Consequently the number of students enrolling in distance education programs is increasing. It is, therefore, important to consider new methods of delivering information to this expanding group of students. The learning experience of distance education students can be enhanced by the incorporation of emerging technologies, such as blogs, wikis and podcasts, into the more established technologies in use.²⁵

Podcasting provides flexible delivery options for off-campus and offshore students. These students can access library information without having to come onto a university campus, which is often impossible for students living in remote areas. Podcasts can help libraries to reach out to distance education students who might otherwise not feel part of the library community.²⁶ It can help to combat the feeling of isolation that distance education students, especially those in remote areas and abroad, often experience, and complement other online learning options, such as ilectures (lectures available electronically via the Internet), view-it tutorials (movie-like tutorials), and online guides that are already used by the library.²⁷

The possibility for students to create their own podcasts and, thereby, to interact with other students can also add to their learning experience. According to Beldarrain, the versatility of podcasting enables it to have a positive impact on how distance education is delivered and how students are engaged in the learning experience.²⁸

Reaching the Millennials

Millennials, Net Generation, Net Gen, and Generation Y are just a few of the terms used in the current literature to describe those born since 1982.²⁹ As a growing number of Millennials come to study at tertiary institutions, their learning preferences will need to be considered when planning any services to make sure that they meet their learning expectations. Millennials will, therefore, have a great impact on the services provided by academic libraries.³⁰ Technologically savvy, they challenge libraries to keep up with their expectations and develop new services to suit their learning styles.³¹ Podcasting is just one method libraries can use to reach out to this user group and maintain relevance in their university learning experience.

The learning preferences of Millennials are characterised by their easy adoption of new technologies into their everyday lives. They are comfortable using a variety of technologies which they see as the norm. Their distinct learning preferences set them apart from other generational groups. Oblinger identifies their preference for teamwork, experiential activities, structure, and the use of technology. They display great multi-tasking capabilities and are comfortable accessing information from a variety of sources at any one time. Multi-tasking allows them to make the most of their time by doing several activities at once, such as instant messaging friends, listening to music, and surfing the Internet.³²

They have a 'learn anytime, anywhere' mentality and expect to be able to access information in a variety of formats, regardless of where they are.

Other attributes of Gen Y (or Millennials) have been identified by Gardner and Eng; they have high expectations, they expect customisation, they are technology veterans, and they utilise new communication modes. The flexible delivery enabled by the use of podcasts is suited to this Net generation, as they customise their own learning and control what and where they learn.³³ By providing access to library information in new formats such as podcasts, libraries enable students to learn in their own time according to their individual schedule.³⁴

While developing services to benefit the learning styles of the Millennials, libraries need to remember their other users, such as Generation X and Baby Boomers (mature age students) who are also part of the 'new' students group. The needs of these user groups cannot be ignored in the planning process for information literacy or library services. However, the needs of these older generation groups are usually already met by more traditional means of information provision which tend to suit their learning styles.³⁵

CURTIN UNIVERSITY LIBRARY'S PODCASTING SERIES

As we have indicated, podcasting is just one of the many emerging technologies that can be used to enhance learning and should be used to complement, and not to replace, current information literacy strategies. Curtin University Library currently offers face-to-face classes, lectures, online tutorials, and guides. At the Library we have used podcasting as a complementary tool to supplement our already existing large range of online information literacy options.³⁶ In doing so we have accepted Kaplan-Leiserson's contention that 'listening to digital audio content won't replace reading, listening to live presentations, or the multitude of other ways learners take in information, but it can augment those methods'.³⁷ By offering a range of services and methods of delivery of library information we can appeal to our entire client base, including Gen Xers and Baby Boomers, Millennials, off-campus and ESL students.

The total number of students enrolled at Curtin University of Technology in 2006 was 40 360 students. Of these, 42.2% were international students (both onshore and offshore) and 6.5% were enrolled as distance education students.³⁸ With students located in Africa, Malaysia, Singapore and Hong Kong, as well as across Australia, our student population is culturally diverse and geographically dispersed. We saw the potential that podcasts offered our diverse student body to obtain library information presented in an exciting way and in an accessible format. We could see that podcasts would allow for flexible delivery of information to those students who are unable to access more traditional information literacy classes that are offered in the Library.

We have been amazed at the popularity of our podcasting series; download statistics have increased week by week. In October 2007 we had our thirty-three thousandth download since the release of our podcasting series in February 2006. This was rewarding and provided the incentive to keep evolving and developing

our series. There is immense satisfaction in the knowledge that you are giving your clientele what they want and in seeing usage statistics soar. Seeing that immediate value motivates us to explore further the capabilities of podcasting and feeds our ambition to offer more.

Creating our podcasts and getting them out into the student arena was a gratifying experience and was an unexpectedly easy and inexpensive process. We were pleasantly surprised at how quick, easy and simple it was to set up and start releasing your own podcasting series. All we needed to get started was a microphone, a computer, audio software (such as the open source software Audacity available free on the web), music and the copyright permission to use it, a webpage on which to publish your podcasts, a podcast feed, and a quiet place to record. A detailed description of how Curtin University Library staff created the podcasting series is given in the paper 'Innovation in a Podshell: bringing information literacy into the world of podcasting' presented at Click '06, the ALIA 2006 Biennial Conference.³⁹

FUTURE DIRECTIONS

When we first developed this series at the end of 2005, for release in 2006, our primary focus was information literacy. We wanted to bring information literacy into the lives of our students through this new medium. Our target group was first-year undergraduate students, so we started the series with information that would assist this particular group – information that reinforces orientation information and reviews and clarifies information already provided by the Library. We did this by creating a 'tip per week' series and tried to ensure the topic was relevant to the particular week of the semester. Our podcasts slowly evolved, and there were times when the key focus shifted from information literacy to 'survival information' – crucial information that a first-year student needs in order to survive their first semester at university.

Curtin University Library is now well into its second year of podcasting. We have expanded our series and divided it into two streams – Introductory and Advanced. The introductory series follows the format created in 2006 and is still aimed at the new undergraduate student. We have, however, made slight changes to the content, as we have updated information as required and re-ordered the series, having determined that students may need access to some information or topics sooner than the original order had allowed. We also changed the music that we used, to provide a new identity for our 2007 podcasts.

Given the success of our first-year undergraduate series in 2006, we focused on keeping this newly hooked audience in 2007. To do this we developed an 'advanced series' aimed at second-year students and above. In this series we have included more research-based topics, focusing on slightly more complex information literacy skills than the first-year students would need, such as understanding copyright issues and using census data.

Outside semester times we have released book review podcasts which have proven to be very popular. This allows us to fill semester breaks, when information literacy topics are not necessarily required by students, and ensures a continual flow of

our podcast series throughout the year. This is important if we are to maintain the listener base we have built up, especially if our listeners are subscribing to the podcast feed and expecting regular instalments.

Another new series we have offered in 2007 is the 'Opinion @ your library' series. In this series the Library invites academics to give an opinion on an area of their expertise. Listeners are then encouraged to give their opinion in response, via the Library blog. In this case we are using two emerging technologies together to try and create debate which, in turn, encourages learning. Librarians also post journal articles supporting both sides of the opinion and debate and which enable the listener to follow up with further research. As well as encouraging intellectual thought and debate, these podcasts also help to promote the Library and Curtin University as a whole. By including the option of interaction into a podcast series, in this case through comments and discussion via the library blog, the learning experience or pedagogical value of the podcast is enhanced.⁴⁰

We have seen that by embracing new technologies, we can appeal to our new generation of learners now and into the future. As this technology develops and more libraries pick this up, we have no doubt podcasts will continue to evolve. We await these changes with bated breath and look forward to what these new developments will offer. Curtin University Library's podcasting series can be viewed at <http://library.curtin.edu.au/podcast/index.html>.

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