

Engaging undergraduates with podcasting in a business subject

Padma Nathan

School of Commerce
Charles Sturt University

Anthony Chan

School of Computing and Mathematics
Charles Sturt University



This study is based on an investigation into the implications of the use of talkback radio-style podcasts in a final year business subject. The authors contend that face-to-face teaching can be supplemented by such podcasts and prove to be a valuable learning experience among these undergraduate students. Beginning with the objectives of the study, the paper continues with a description of the research methodology before addressing the findings derived from a questionnaire over a semester of podcasting efforts. It concludes with suggestions for other business educators interested in undertaking similar efforts with the intention of contributing towards best practice in the field of academic podcasting.

Keywords: educational podcasting, MP3, talkback radio, supplementary teaching.

Introduction

This podcasting report is based on a study which is part of a more comprehensive research initiative directed at investigating the pedagogical implications of podcasting, and more specifically, the use of this technology in fostering good practice in teaching and learning. While the initial pilot work (Chan & Lee, 2005) involved the application of podcasting to alleviate anxiety inherent in students on a cohort of students studying a first year information technology subject, this study was directed at a different group. Taught to undergraduates in the final year, Business Strategy is considered as a capstone subject because of its significant coverage and consolidation of the various functional elements in the Bachelor of Business programme.

The principal reason for the use of podcasting is derived from the belief of the authors that the preconceptions of the students can be addressed before formal instructions take place, so that the learning experience within the classroom can be more productive. Podcasting offers an ideal opportunity to introduce elements of a topic to students before they attend formal lectures or tutorials, using technologies that they are familiar with.

Development of podcasting and literature review

Over the last 7 years, growth in podcasting has been phenomenal. The advent of the MP3 player, high-speed Internet access and ease of use software that is freely available have been instrumental in podcasting featuring extensively in the commercial world (Rainie & Madden, 2005). However, the assimilation of this technology and its use in teaching and learning in the higher educational environment has seen a relatively slow uptake. This is quite apparent in the scant number of academic research papers compared to the sizeable number of articles in various trade publications on the application of podcasting in the commercial environment. This sluggishness among academic institutes may be symptomatic of the general lag in adoption of many new technologies because they often do not have the resources to adopt them in a major scale. However, the situation is changing and over the last few years, a number of universities have embarked on various projects to ensure that their students benefit from the promise of these technologies and modes of learning (Balas, 2005).

The initiatives of educational institutions are currently three-pronged (Vogele & Gard, 2006): administrative podcasts, special lecture series and classroom podcasts. The administrative podcasts are designed for new or potential students and encompass various functions of the university. Special lecture series are based on seminars or specific lectures on a theme. The third type, which seems to be more common, is podcasting the traditional classroom lectures. The authors of this paper experimented with a fourth format that is reminiscent of radio-style talkback. Radio has been used to teach a wide range of subjects at various levels of the education system (Bates, 1981; Bosch, 1997; Romero-Gwynn &

Marshall, 1990). The intention here was to maximise interest and appeal among students rather than offer a mechanism to replace face-to face lectures and tutorials. Over a period of six weeks, podcasts were created in the form of discussions between the subject matter expert and a student on various issues in the subject of Business Strategy. The topics were decided after deliberating on aspects of the subject that were deemed to be more complex or where it was inferred that students may face some anxiety. This was another reason that the podcasts were intentionally designed in the form of talkback sessions between a student and the lecturer, i.e. the discussion in a relaxed and informal style offered a means of alleviating their concerns in the topic. This is similar in format to what has been described by Lee, Chan, & McLoughlin (2006) where podcasts were produced with a student holding discussions on pertinent issues related to the subject and its content in a relaxed and informal style. The lecturer, in this case, was brought in as “a guest” to offer insight into, or clarification of, the more difficult or complex issues and topics. Power (1990) quotes Durbridge (1984) who identified audio’s educational advantages as its ability to influence cognition through clarity of instructions and emotional aspects of learning by conveying immediacy and a connection with the teacher.

As stated earlier, the principal intention was to examine if the benefits of podcasting were recognised by students in the form of a more productive learning experience. Much of the research work in podcasting over recent years has supported this belief (Maikat, Martinez, & Jorstad, 2007). Complementing this is an often-expressed view related to the technology that is ubiquitous, of low cost and easy to use – this facilitates the use of podcasts by students (and also the creation of this by academics, without greatly increasing their work load) (Lee & Chan, 2006) But some writers such as French (2006) have alluded not only to the ineffectiveness of podcasting compared to other interactive learning tools, but the possible negative implications of these new technologies. Rudnesky (2003) mentions that the use of technology should not be for the sake of technology. He argues that a specific technology should be used only if it is instrumental to the success of the project.. Settlage, Odom, & Pedersen, (2004) cite Zhao & Conway (2001) who report several troubling aspects of technology implementation. These included a propensity to favour innovative technologies over more established media, an assumption that reform was an inevitably accompanied technology implementation and the premium upon improved test scores with substantially less attention given to improving teaching for understanding. However, some of these studies offer conflicting and even contradictory findings. Mayer & Moreno (2003) suggest comprehension and retention increase if information (that is related) is offered to subjects through different sensory channels. The implication here is that audio-only learning tools may not be as effective as multimedia systems. Nist-Olejnisk & Holschuh (2002) cited by French (2006) suggest an environment that decreases sensory input and distractions is more conducive for studying. However, this discounts anecdotal evidence of the younger generation being quite competent in multitasking and listening to an audio track while jogging for example. Donnelly & Berge (2006) mention that MP3 players were small and that “learners can maximise commute time, exercise time, or housework time by grabbing their MP3 players.” While authors refer to the notion of students being able to review lecture material anytime, anywhere, while doing anything, other proponents argue that students can replay podcasted lectures as often as they need – this would be most beneficial to those who have difficulties with the language (Bull, 2005).

Methodology

Over a period of six weeks, podcasts were created in the form of discussions between the subject matter expert and a student on various issues in the subject of Business Strategy. The topics were decided after deliberating on aspects of the subject that were deemed to be more complex or where it was inferred that students may face some anxiety. Students were advised on various techniques of downloading these podcasts and the use of Real Simple Syndication (RSS). RSS is the automated feed that is linked to the university’s podcast server to enable automated downloads whenever a new file is ready. The use of iTunes as a podcatcher was recommended as this was freely available and offered features that facilitated downloading the most recent podcasts. Just before the end of the session, students were requested to complete a questionnaire designed to establish the role of podcasting in the subject. In addition to basic demographic data on the students, questions were directed at access to podcasting equipment and their experience with the podcasts. Finally, general comments on the exercise were solicited. To measure the views of the students on the educational value of the podcasts, the manner in which they listened to them, and the technology used, a total of 16 questions were developed, incorporating a 7-point Likert Scale that measured the extent to which the students agreed or disagreed. A total of 21 of the 23 students in the class participated in the exercise.

Findings

The responses on the educational value of the podcasts and the technology involved have been collated and presented in the 2 tables below. Table 1 illustrates responses on the educational value of the podcasts where there was a tendency for the majority of the students to select “Agree”, “Strongly Agree” or “Very Strongly Agree”. The second table focuses on the inappropriateness of the podcasting exercise and the notion of listening to podcast as being trendy and it is evident that most responses were within the range of “Neutral” to “Strongly Disagree”.

Table 1: Responses to questions on educational value of podcasts – November 2006 (N=21)

Please rate the following statements using the scale 1=Very Strongly Disagree, 2=Strongly Disagree, 3=Disagree, 4=Neutral, 5=Agree, 6=Strongly Agree, 7=Very Strongly Agree:	Mean	Standard Deviation
1. Subscribing to the feed to allow automatic download of the podcasts as they become available makes it easier for me to obtain them	5.6	1.20
2. The topics selected so far are appropriate and useful	6.0	0.86
3. I find it easy to access the podcasted audio files	5.7	0.85
4. I find it easy to play the podcasted audio files.	6.1	0.70
5. I would recommend that other students undertaking this subject listen to the podcasts	5.9	0.79

The findings in this study correspond to those of other similar research work (Chan & Lee, 2005; Maag, 2006; Tynan & Colbran, 2006). The study indicated the majority of the students agreed with the usefulness of the podcasts and would support continuing application of this learning tool. It is quite apparent that the technology inherent in podcasting is not a hindrance. Of more significance is the positive response of the students directed at the learning experience with the various topics in this subject. Many have indicated that they will recommend it to other students taking the same subject.

Some of the comments given by the students indicated that podcasts in a business subject helped them to “catch up” what they could have missed in classes. For example:

Helped clarify some areas that I did not fully understand.
How easy it is to learn a topic when I listen [to the podcast] multiple times.
Having podcasts for each topic would make studying it very easy and practical.

Table 2: Responses to questions on inappropriateness of the podcasts and social acceptance – November 2006 (N=21)

Please rate the following statements using the scale 1=Very Strongly Disagree, 2=Strongly Disagree, 3=Disagree, 4=Neutral, 5=Agree, 6=Strongly Agree, 7=Very Strongly Agree:	Mean	Standard Deviation
1. Listening to the podcasts is trendy and socially acceptable	3.9	1.58
2. Podcasting is not appropriate for this subject	2.7	0.97
3. I find the topics presented not appropriate to my needs	3.1	1.26
4. I feel that listening to the podcasts is not a productive use of my time	2.7	1.02

The survey also revealed a surprising find with the majority of the students expressing their view that listening to podcasts is not a fad. This may simply be a reflection of the cultural and social norms and habits of the present generation of students or the specific cohort which was made up of mainly domestic Australian students, aged 20 to 25. The response rate to the survey is 91%. Only two did not return the survey.

Some of the comments that were against podcasts centred on time management and perceived University policy:

With the present workload, I do not have the time to listen to podcasts!
I would hate to think the university would replace lectures for podcasts in the future. We are already paying a heavy price for subjects for face-to-face teaching.

Conclusion and future work

This study of a business cohort has provided valuable feedback in terms of non-technical students learning through podcasting. These students had little difficulty in assimilating new technologies after experimenting with RSS settings and a podcatcher. More significantly, the study revealed the positive

perceptions of the students in using podcasting technologies and their willingness to assimilate this new mode of learning. In addition, the survey illustrated how talkback style podcasts can become a complementary and an integral learning tool.

The next phase of the exercise would be to compare these findings with other cohorts of students, including a group which enrolls in the same subject for the next session. The intention here is to examine if consecutive generations are more familiar of and receptive to the role of new technologies for learning purposes. In addition, issues of podcasting being trendy or socially acceptable need to be researched. The authors feel that this definition is largely dependent on the interpretation of the word. The respondents being “digital natives” did not perceive technology related to podcasting as an addition to the arsenal of electronic tools they already possess, while “digital immigrants”, as contended by Prensky (2001) may distinguish it as a new tool being introduced into the lifestyle. However, the authors believe with proper instruction and adequate experience, both these groups will acknowledge podcasting and associated technologies can be easily integrated into the teaching-learning environment with pleasant experiences for both the instructor and the learner. Subsequent studies with various groups of students will offer an insight into these research questions and help create the standards for best practice for podcasts in a university, more specifically in the learning environment of such an institute.

References

- Balas, J. L. (2005, Nov/Dec 2005). Blogging Is So Last Year - Now Podcasting is Hot. *Computers in Libraries*, 29-32.
- Bates, A. W. (1981). Radio: The Forgotten Medium? Studies in the Use of Radio Programming and Audio-Cassettes in Open University Courses, *IET: Papers on Broadcasting* (Vol. 185): Milton Keynes.
- Bosch, A. (1997). *Interactive Radio Instruction: Twenty-Three Years of Improving Educational Quality*. World Bank Human Development Department Education Group.
- Bull, M. (2005). No Dead Air! The iPod and the Culture of Mobile Listening. *Leisure Studies*, 24(4), 343-355. <https://doi.org/10.1080/0261436052000330447>
- Chan, A., & Lee, M. J. W. (2005). *An MP3 A Day Keeps The Worries Away: Exploring the use of podcasting to address preconceptions and alleviate pre-class anxiety amongst undergraduate information technology students*. Paper presented at the Student Experience Conference. from <http://www.csu.edu.au/division/studserv/sec/papers/chan.pdf>
- Donnelly, K. M., & Berge, Z. L. (2006). Podcasting: Co-opting MP3 Players for Education and Training Purposes *Online Journal of Distance Learning Administration*, 9(3).
- Durbridge, N. (1984). Media in course design, No. 9, audio cassettes. In *The Role of Technology in Distance Education*. Kent: Croom Helm.
- French, D. P. (2006). iPods: Informative or Invasive. *Journal of College Science Teaching*, 36(1), 58-59.
- Lee, M. J. W., & Chan, A. (2006). Exploring the Potential of Podcasting to Deliver Mobile Ubiquitous Learning in Higher Education. *Journal of Computing in Higher Education*, 18(1), 94-115.
- Lee, M. J. W., Chan, A., & McLoughlin, C. (2006). *Students as Producers: Second Year Students' Experiences as Podcasters of Content for First Year Undergraduates*. Paper presented at the 7th International Conference on Information Technology in Higher Education and Training.
- Maag, M. (2006). *iPod, uPod? An emerging mobile learning tool in nursing education and students' satisfaction*. Paper presented at the Annual Conference of the Australasian Society of Computers in Learning in Tertiary Education
- Maikat, R. P., Martinez, R. D., & Jorstad, J. A. (2007). Podcasting for your class. *The Journal of Physical Education, Recreation & Dance* 78(5), 14-16. <https://doi.org/10.1080/07303084.2007.10598016>
- Mayer, R. E., & Moreno, R. (2003). Nine Ways to Reduce Cognitive Load in Multimedia Learning. *Educational Psychologist*, 38(1), 43-52. https://doi.org/10.1207/S15326985EP3801_6
- Nist-Olejnisk, S., & Holschuh, J. P. (2002). *College Rules! How to Study, Survive and Succeed in College*. Berkeley, CA, USA: Ten Speed Press.
- Power, D. J. (1990). *The Use of Audio in Distance Education*. Singapore: Asian Mass Communication Research and Information Centre.
- Prensky, M. (2001). Digital Natives, Digital Immigrants. In *On The Horizon* (Vol. 9): NCB University Press. <https://doi.org/10.1108/10748120110424816>
- Rainie, L., & Madden, M. (2005). Podcasting Catches On. from http://www.pewinternet.org/pdfs/PIP_podcasting2005.pdf
- Romero-Gwynn, E., & Marshall, M. K. (1990). Radio: Untapped Teaching Tool. *Journal of Extension*, 28(1).
- Rudnesky, F. (2003). From Vision to Classroom and Beyond. *Principal Leadership*, 3(6), 44-47.

- Settlage, J., Odom, A. L., & Pedersen, J. E. (2004). Uses of Technology by Science Education Professors: Comparisons With Teachers' Uses and the Current Versus Desired Technology Knowledge Gap. *Contemporary Issues in Technology and Teacher Education*, 4(3), 299-312.
- Tynan, B., & Colbran, S. (2006). *Podcasting, student learning and expectations*. Paper presented at the Annual Conference of the Australasian Society of Computers in Learning in Tertiary Education
- Vogele, C., & Gard, E. T. (2006). Podcasting For Corporations And Universities: Look Before You Leap. *Journal of Internet Law*, 10(4), 3-13.
- Zhao, Y., & Conway, P. (2001, 27 Jan 2001). What's In, What's Out - An Analysis of State Educational Technology Plans. *Teachers College Record* Retrieved 10 October, 2007, from <http://www.tcrecord.org/content.asp?contentid=10717>

Padma Nathan

School of Commerce, Charles Sturt University, Locked Bag 588, Wagga Wagga, NSW 2678, Australia
pnathan@csu.edu.au

Anthony Chan

School of Computing & Mathematics, Charles Sturt University, Locked Bag 588, Wagga Wagga, NSW 2678, Australia. achan@csu.edu.au

Please cite as: Nathan, P. & Chan, A. (2007). Engaging undergraduates with podcasting in a business subject. In *ICT: Providing choices for learners and learning. Proceedings ascilite Singapore 2007*. <https://doi.org/10.65106/apubs.2007.2550>

Copyright © 2007 Padma Nathan and Anthony Chan

The authors assign to ASCILITE and educational non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to ascilite to publish this document on the ascilite web site and in other formats for *Proceedings ascilite Singapore 2007*. Any other use is prohibited without the express permission of the author(s).