

Choice, communication and learner autonomy: The development of social competence skills using podcasting technologies



Anthony Chan

Charles Sturt University
Wagga Wagga, NSW

Catherine McLoughlin

Australian Catholic University
Canberra

The potential of podcasting to support teaching and learning has been highlighted in the past year, linked with a new wave of Web 2.0 tools and their potential for knowledge building, creativity and innovation in learning. In an increasingly technologised world, learners need digital skills and social competencies that enable them to communicate and learn in different modalities. This paper reports on a pilot study that aims to improve oral presentation and self-regulatory skills through podcasting at a regional Australian high school. Instead of using the technology merely to deliver learning resources, the approach adopted was to support student podcasting of their personal interpretation of concepts and ideas in key subject areas to share with peers and the wider community. By supporting learner choice and agency in this manner, greater engagement in learning is anticipated by all stakeholders.

Keywords: educational podcasting, MP3, peer teaching, knowledge building

Introduction: the uptake of podcasting in education

Beyond learning from text based resources, social software tools such as blogs, wikis and podcasts offer a raft of possibilities for students to connect, communicate, create and share ideas and learn through collaborative processes mediated by technology. Podcasting technology is extending its reach into education and training in visible and manifold ways. The iPod is no longer an instrument for individual audio appreciation and leisure, but a tool that can deliver resources, services and educational content. In higher education and in the K-12 sector, podcasting has also been taken up enthusiastically, and learner-centred applications of the technology abound. In this sector, “podcasts are being created mainly as experiential, authentic, group based constructivist learning experiences” (Atkinson, 2006, p. 21). Orange Grove Primary School (DET, WA, 2006) is an excellent example in which third and fourth grade student’s work together to produce podcasts on topics of their choosing, to share significant insights and activities with an Internet audience. The strategy has proved extremely successful in exciting, engaging, and motivating students to read, write and do research, while honing their oral presentation skills. Such developments and pedagogic applications of podcasting are promising examples of how podcasting technology is moving away from didactic modes of teaching and transmission of content (McLoughlin & Lee, 2007; Chan & Lee, 2007).

Developing a pedagogical model of podcasting

The project described in this paper focuses on developing a pedagogical podcasting model, integrated into the school curriculum whereby students develop communication skills by recording their interpretations and ideas of in-class concepts, communicating these to peers and eliciting feedback. The specific research questions are as follows:

- What pedagogical models can support the integration of podcasting into the teaching of mathematics, science and history to support student learning in an Australian high school?
- How can podcasting be used to enable students to take an active role in learning by extending the choices they are given to communicate and learn with peers?

Context of the study

The geographical area where the school is located is a hub of agribusiness, agriculture, agronomy, animal production, equine management, horticulture, irrigation and food processing. Many of the students in this

regional school are first-generation learners studying up to Year 10/12. Feeder primary schools come from as far as 60 kilometres away. Many students travel to school by bus, taking up to 50 minutes in travelling time each way. The school has already approved the use of MP3 players for these students, so that they can access sound files during travel time. A survey of teachers at the school revealed the need for additional skills in digital technologies and applications, while it was recognised that regional and rural students would benefit by being able to listen in to podcasts of academic material during “downtime” or travel time. The project aims address these issues in context and to improve the learning outcomes of these regional students across a range of key learning areas by using ICT in innovative and creative ways that are both relevant and appealing, while being fully integrated with the school curriculum.

A further focus of the project is to capitalise on the availability and use of iPods among students in order to develop podcasting methods to improve oral presentation skills in a number of subject areas including Maths, Science and History. Many of these students aspire to progress to tertiary education and enter a nearby regional university after Year 12 completion, and will need high level communicative skills. A further rationale for the study was therefore to develop generic (oral) skills for university entrance as it has been noted that many first year students lack the oral presentation and communication skills to succeed at university. The project was intended to appeal to students in fringe regional and rural areas who spend a lot of time in school buses daily, often “plugged-in” to a set of earphones for most of the journey. By tuning into short podcasts created by their own classmates explaining science and maths concepts or relating an historical experience, and responding with a talk-back podcast by them to provide feedback was considered a strategic way to increase interest and motivation, while improving digital literacy and communication skills.

Methodology: Engaging students in podcast creation

In the project, where the context is the high school curriculum, the achievement of the intended learning outcomes occurs through student planning, recording and creation of podcasts, in the form of short radio talk-backs style narrative episodes available to other students. The High School is now evolving as an active podcasting “community of practice”, with teachers working with students in preparing podcasts of additional information for their weekly school newsletter.

The pilot project has been launched in the school with two groups of students being taught podcasting. The preparatory session consisted of the developing the following skills: script writing and editing, audio presentation, audio recording and editing, mechanisms of publishing and distribution of podcasts, evaluation of good podcasts and an explanation into the difference between software available on the Apple Macintosh and Microsoft Windows platforms. The training team consisted of the researchers and a team of 2 female and 2 male undergraduate university students acting as facilitators.

Project progress

Following the initial training, podcasting activities in history, mathematics and science are being prepared in consultation with subject teachers and students. These will later be made available to students and on the school website. In addition, the facilitators see the need to have guidebooks prepared with modules that are geared to teaching podcasting skills to high school students. An *Acceptable Use Policy* has also surfaced as one of the requirements for the participants to understand what can or cannot be done.

The active, positive engagement of students in this pilot is demonstrated by these encouraging words, published in the school newsletter.

Ms. Brady’s Year 11 Modern History has completed researching podcasts for their Decolonisation in Indochina oral assessment tasks. Ms. Brady was chuffed with the balance of historical detail and creativity evident in the recordings. As well as the podcasts, the class then actively and responsibly engaged in peer assessment of each other’s work. In the follow-up workshop where we listened to the finished products, the students shared their ideas on the scoring and gave some really perceptive and positive feedback to other students. Great work, great enthusiasm – well done!

Success factors

Though only the pilot stage has been completed, the project has attracted whole school support and students are eager to be involved, not only as creators of podcast episodes, but also as recipients of peer

generated audio files, which they can listen to while travelling to and from school. The uptake of the innovation and responsiveness of stakeholders is indicative of a radical shift towards the social and personalised use of technology, and while harnessing the “always on” nature of mobile technologies, is also promoting self-regulatory approach to learning, by giving students a voice in where, how and how often they choose listen to and respond to peer created podcasts.

References

- Atkinson, R. (2006). Podcasting: Do you really need to know? *HERDSA News*, 28(3), 20-22.
<http://www.users.bigpond.net.au/atkinson-mcbeath/roger/pubs/herdsa-newslet28-3.html>
- Chan, A., & Lee, M. (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, 5-7 September, Wagga Wagga, NSW. <http://www.csu.edu.au/division/studserv/sec/papers/chan.pdf>
- McLoughlin, C. & Lee, M.J.W. (2007). Listen and learn: A systematic review of the evidence that podcasting supports learning in higher education. In C. Montgomerie & J. Seale (Eds), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2007* (pp. 1669-1677). Chesapeake, VA: AACE.

Acknowledgements

This project is funded by the National Centre for Science, ICT and Mathematics for Rural and Regional Australia at the University of New England (SiMERR) and by coordinated by SiMERR ACT.

Anthony Chan, Charles Sturt University, Locked Bag 588, Wagga Wagga, NSW 2678, Australia. Email: achan@csu.edu.au

Catherine McLoughlin, SiMERR ACT Coordinator, School of Education, Australian Catholic University, PO Box 256, Dickson, ACT 2602, Australia. Email: catherine.mcloughlin@acu.edu.au.

Please cite as: Chan, A., & McLoughlin, C. (2007). Choice, communication and learner autonomy: The development of social competence skills using podcasting technologies. In *ICT: Providing choices for learners and learning. Proceedings ascilite Singapore 2007*.
<http://www.ascilite.org.au/conferences/singapore07/procs/chan-poster.pdf>

Copyright © 2007 Anthony Chan and Catherine McLoughlin

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 authors 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 authors.