The value of lecture podcasting for distance and on-campus students

Rob van Zanten
School of Agriculture, Food and Wine
The University of Adelaide

The purpose of this paper is to explore the value of podcasting the traditional classroom lecture to distance (external) and on-campus (internal) students. Download data are compared for distance and on-campus students enrolled in the same course. This exploratory research shows that for distance students at least, the lecture podcast appears to have some pedagogical merit. However, the format may have its limitations as shown by the marked decline in download activity of successive lectures in both of the courses examined.

Keywords: educational podcasting, audio, distance education, lecture recording, teaching and learning strategies

Introduction

Educational podcasting is capturing the imagination of academics around the globe. Essentially, educational podcasting is a low-cost technology based on Really Simple Syndication (RSS) that allows audio content from user-selected feeds to be automatically downloaded onto students' computers as it becomes available, and then onto mobile devices such as iPods and other MP3 playback devices for listening at a time and place of their choosing (Lee & Chan, 2007).

Although podcasting is a relatively new addition to the educator's technology toolbox, the use of audio in education is anything but new. Audio (such as radio and the audio cassette recording) has been used for many years especially in distance education and its advantages have been well documented. Durbridge (1984 as cited in Edirisingha, Rizzi, Nie & Rothwell, 2007) identified five key advantages of audio learning. Durbridge found that students liked audio because they liked: (1) responding to sound; (2) listening in on conversations; (3) being 'talked through' tasks; (4) hearing facts, discussions and opinions from experts in their field; and (5) being encouraged by the voice of somebody they know and respect. Podcasting has taken audio learning to a higher level, with students now having the ability to access audio 'on the move' when and where they like. As Mikat, Martinez & Jorstad (2007) point out, 'podcasts are versatile, reusable, interesting and stimulating to the new generation of technology-savvy student'. For the distance student, podcasting has even greater potential through fostering a sense of inclusivity and belongingness to the learning community, and by reducing isolation-induced anxiety (Lee & Chan, 2007).

Vogele & Gard (2006) have identified three kinds of podcasts used in the higher education sector: administrative podcasts (university information aimed primarily at new or future students); special lecture series podcasts (topical lectures or seminars); and the traditional classroom lecture podcast. Lee and Chan (2007) have experimented with a fourth type of podcast, a short 3 to 5 minute talkback-radio style podcast, and question the pedagogical soundness of podcasting the traditional lecture format. Wagstaff (2007) concurs, warning "simply recording the audio component of a weekly lecture can potentially result in an experience for the listener that is boring, disconnected and difficult to follow".

This may be so for the on-campus student. But the question arises of the pedagogical value of the lecture podcast for the distance student. Would distance students find the lecture podcast useful in their learning experience? A number of authors have recommended that educators refrain from podcasting lengthy lectures (Chan, Lee & McLoughlin, 2006; Fose & Mehl, 2007; Wagstaff 2007; Mikat, Martinez & Jorstad 2007), but do these cautions hold true in the context of distance education? The objective of this current research is to throw some light on these questions by investigating the difference in use of the traditional classroom lecture podcast by internal (on-campus) and external (off campus/ distance) students.

Students actively enrolled in two marketing courses Wine and Society (n=30) and Advertising and Promotion (n=31) were the subjects for this research, each course comprising an entirely different student cohort. The courses were delivered both internally and externally, the two versions being identical in

content. The internal student population for both courses was 13. The gender balance across all student cohorts was similar (50% male: 50% female) although the external cohorts were slightly older. Students who had enrolled either internally or externally in the same course had access to the same podcasts via their own course websites. A total of 10 podcasts were made available for Wine and Society, fourteen for Advertising and Promotion. Although all cohorts have had access to PowerPoint lecture material via Blackboard for some time, the availability of podcasts was an entirely new experience for all students.

Method

The lecture series of two marketing courses were audio recorded in first semester 2008 and posted on the course management system Blackboard (generally the day after the lecture was delivered) for audio streaming as well as conversion to MP3 files. Not all lectures in the series were recorded. Students were advised (by email) of the availability of the audio files at the beginning of the semester, and once again mid semester (17 April). Student access to the podcasts was monitored via Blackboard's Statistics tool, and at semester's end the download statistics for each lecture were collated. The findings of this paper are based upon these statistics and form part of a larger study that will include data drawn from paper-based SELT (Student Evaluation of Learning and Teaching) questionnaires.

Results

Figure 1 shows the download statistics (hits per student) for the course Wine and Society separated into internal and external cohorts. It shows that the external student cohort downloaded a markedly greater number of podcasts per student than did the internal cohort. Further, it shows a steady decline in downloads of each subsequent lecture as the semester progressed. Some of the later lectures were not downloaded at all by the internal cohort.

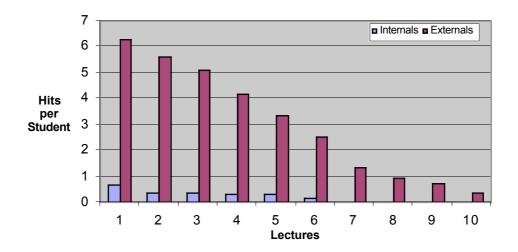**Figure 1: Podcast downloads, 2002/7030 Wine and Society (n=30)**

Figure 2 for Advertising and Promotion shows a similar pattern to that of Figure 1, with the greater use of podcasts by the external cohort, and a steady decline in the download of each successive lecture. Figure 3 shows the download statistics (hits per student) over the course of the semester for the introductory lecture of the course Advertising and Promotion. This particular lecture was chosen for analysis because it provided the greatest download "traffic" over the longest time period. The podcast of this lecture was posted on 11 March, and the final examination of the entire course was held on 25 June. The download statistics have again been separated into internal and external cohorts, while the semester has been divided into eight half-monthly periods as follows: (1) 1-15 March; (2) 16-31 March; (3) 1-15 April; (4) 16-30 April; (5) 1-15 May; (6) 16-31 May; (7) 1-15 June; and (8) 16-30 June. Figure 3 illustrates a different podcast download pattern for internal and external students. The internal cohort downloaded the lecture soon after its delivery and in the week before the examination. The external cohort exhibited a somewhat more consistent download pattern over the course of the semester.
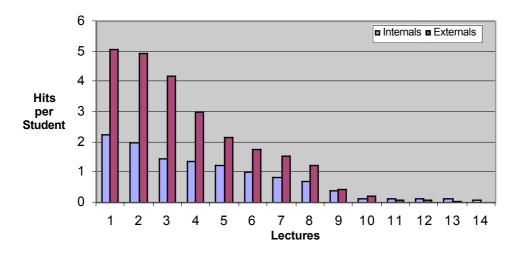
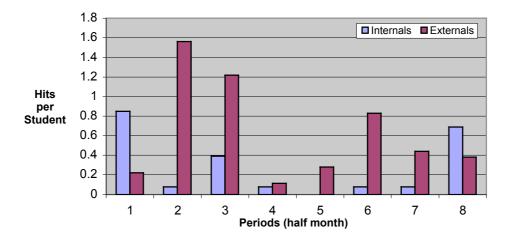**Figure 2: Podcast downloads, 3034/7003 Advertising & Promotion (n=31)**

Figure 3: Podcast downloads, Lecture 1, Advertising and Promotion

Discussion

Figures 1, 2 and 3 taken together show that external (distance) students downloaded the podcasted lectures to an observably greater extent than the internal (on-campus) students, and more consistently over the semester (at least in relation to the one lecture examined). Although it is acknowledged that downloads do not necessarily reflect the degree to which students may have listened to the lectures, the difference between the internal and external cohorts is marked enough to support the statement of Edirisingha, Rizzi, Nie & Rothwell (2007) that 'podcasting may well be valuable for distance learning'.

Several explanations have been put forward in recent literature as to why podcasting may be valuable for distance students. First, podcasts add variety to the distance learning experience (Schlosser & Burmeister, 2006). For many distance students, learning is a text or visual-only experience. Podcasts can supplement, support and add that all-important human dimension to the textbook, study guide, course outline and Blackboard PowerPoint slide presentation, 'providing reinforcement and backup of, and a different perspective on, information and concepts covered in these materials' (Lee & Chan, 2007).

Second, podcasts allow flexibility in learning, an aspect generally appreciated by distance students. If we accept the premise that students who enrol in distance courses do so largely for reasons of convenience (Galusha 1997), the ability to download podcasts at any time, to listen to them as often as they wish and at their own pace, furthermore while doing other tasks, would be highly regarded by most distance learners. Learner choice and flexibility are considered to be key factors when it comes to designing distance education courses (Edirisingha, Rizzi, Nie & Rothwell, 2007).

Third and last, podcasts help distance students feel less isolated and more connected to the learning community (Beldarrain, 2006). Lee & Chan (2007), when summing up the findings of their research in relation to short 3 to 5 minute podcasts, believe that podcasting has 'tremendous potential to assist in acculturating distance learners and aiding them in moving towards complete social and academic integration into institutional life'. Students felt less isolation-induced anxiety and a greater sense of belongingness to the learning community (Lee & Chan, 2007).

A striking aspect of Figures 1 and 2 is the marked decline in download activity of successive lectures as the lecture series progressed, so much so that some of the later lectures were not downloaded at all. There could be a number of possible explanations for this behaviour such as time pressure, student fatigue and so on, but it can't be discounted that the format of the podcasts (the traditional classroom lecture) played a role. Lectures may indeed be too long and tedious as a podcast format, as several researchers have claimed. On the other hand, the recording of classroom lectures is perhaps the most 'convenient' podcast format from the educator's viewpoint, and as this current research shows, of some value to distance students.

Conclusion

Although some researchers have questioned the pedagogical soundness of podcasting the traditional classroom lecture, this exploratory research shows that for distance students at least, the lecture podcast appears to have some merit. However, the format may have its limitations even in distance education, as suggested by the marked decline in download activity of successive lectures. Further research needs to be undertaken in order to gain a better understanding of this behaviour. Specifically, further research could focus upon the pedagogical implications of download behaviour over the course of a semester according to the type of lecture material (for example, humanities or science), type of student (for example, local or international), and type of podcast (for example, short summary podcasts or full-length lecture podcasts).

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Author: Rob van Zanten, School of Agriculture, Food and Wine, The University of Adelaide, Adelaide. Email: rob.vanzanten@adelaide.edu.au