

# Was it Pod Worthy? A Preparatory Plan for Evaluating Podcasting in Higher Education

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**Abstract:** Students and teaching staff in higher education are constantly looking for new tools to help them study and teach more efficiently. The University of Canterbury began ProjectPodcast to introduce podcasting to a number of subjects as an add-on to the current course curriculum. Podcasting is being used to enhance mobile learning and enthuse both students and lecturers. Previous podcasting evaluations show that there exists a need for both audio content from lectures, or so called “LectureCasts” as well as supplementary material or “Sup!Casts”. In this study, we will be evaluating ProjectPodcast. The evaluation is aimed at both the student population as well as the lecturing staff in order to gain knowledge about their impressions of podcasting. Prior podcasting surveys have received low response rates, due to the choice of time, location and medium. Hence, our evaluation plan has been created with the goal of encouraging feedback from students and lecturers. In this paper we present our preparatory plan for evaluating ProjectPodcast.

**Keywords:** Podcasting, higher education, evaluation, educational technology, mobility

## 1 Introduction

The current generation of students in higher education are rapid adopters of new technology, with lecturers always looking for new and exciting methods to encourage students to continue their studies outside the classroom. Podcasting is seen as an innovative way to engage students in their course work. The simple act of utilising technology as part of their learning is often seen as a more attractive option to students than the thought of sitting down to read course material. Several universities have picked up on this and are producing their own podcasts to aid students in their studies.

Podcasts are multimedia files, usually in the mp3 format, distributed by subscription to an RSS-feed that allows downloads to be ‘pushed’ onto digital playback devices. Some universities are providing audio content of lectures, while others are producing supplementary material, with the hope of stimulating interest in the subject area. By nature, podcasts are informal recordings often made in one continuous session with little or no editing done before release. Despite often large

audiences, inducing feedback from listeners is one of the most difficult tasks for podcast creators. This is especially important in the educational situation, where teaching staff need to know whether their efforts are being wasted on producing podcasts or whether the material covered could be adjusted to further benefit student's learning. There has also become an ever increasing need to convince management that time and money is being spent appropriately. The best way to provide evidence of the worthiness of a concept is through evaluation.

This paper describes the preparatory planning for evaluating ProjectPodcast—an initiative at the University of Canterbury to encourage lecturers from a variety of departments (including Computer Science, Economics, Japanese, Music and Education) to provide podcasts for their courses. We firstly give examples of how podcasts are currently used in higher education and then consider evaluations of podcasting that have already been conducted and the shortcomings of these. We then describe our preparatory planning for the creation of the ProjectPodcast evaluation. The evaluation includes both the student population and the teaching staff who are producing the podcasts. We also discuss our thoughts on how to encourage participation, especially from the students involved in the project.

## **2 Podcasting in Higher Education**

Universities have taken two different paths in providing podcasts for their students. The first has been to provide recordings of the lectures, allowing those who miss all or part of them to catch-up. We call these "LectureCasts". The second is to produce podcasts containing supplementary material, news and information, which may or may not form part of the examinable course content. These we call these "Sup!Casts", the name deriving from: "supplementary" and the colloquial abbreviation of "What's Up?"—"Sup?". The question mark is replaced with an exclamation mark in recognition of podcasting being a one way medium.

Podcasting in higher education has caught on but evaluation data is scarce and only a few universities have published their results. An online survey for the podcast pilot in 2005 at University of Washington reported by Lane (2006) found that 70% of students said that the LectureCasts supported their learning and were helpful when preparing for homework and exams. The response rate was low, 41 out of 148 enrolled students completed the voluntary survey, but this may indicate the perceived value. Interestingly, 81% of the students used a desktop computer rather than a portable player to listen to the podcasts. The University of Southern California had two spring courses in 2006 with their LectureCasts being evaluated and the outcome was regarded as positive in both cases (Wolff, 2006). However, the reasons for their success differed as one course had a large number of students for whom English is their second language who listened to the whole lectures again, while the participants of the other course valued having the recording to replay specific explanations to understand difficult material.

At the University of Canterbury an initial survey asked students to report their level of interest (5-point scale from 1 for not interested to 5 for very interested) for three types of material in the podcasts. The number of students showing an interest

level of 4 or 5 (i.e. more than neutral) was 50% for the recordings of lectures, 72% for summaries and extra information, and 65% for related topical issues. Overall the students indicated a preference for the supplements, although the demand for LectureCasts is present (Bell et al., 2006). A deeper analysis of the collected surveys revealed that students are very reluctant to respond to open ended questions. Likert scale or tick-box style questions were far more likely to be answered. This is important for future questionnaires as some respondents may have been 'turned off' by the large amount of writing required.

The results from the previous evaluations have lead us to believe there is a need for both LectureCasts as well as Sup!Casts. LectureCasts are especially useful for students for whom their native language differs from that of the course. Also, the opportunity to be able to replay all or certain parts of a lecture is valuable when the material is complex, if the student lost focus or simply did not attend. It seems that LectureCasts are used in conjunction with other study equipment (notes, textbooks, and websites). This reinforces our view that podcasting lectures does not take full advantage of the potential of the medium to facilitate mobile learning.

### **3 Evaluation Methodology**

The evaluation of ProjectPodcast is to be performed in-house, so to reduce bias and outside critique, we will follow Oliver's (2000) structured model of evaluation. In this section we describe how the evaluation steps will be followed for ProjectPodcast:

*1. Identification of Stakeholders:* In the case of ProjectPodcast we have three groups of stakeholders: the administrators, the lecturers and the students. The administrators include the funding body and the staff involved in organising and promoting the project. The lecturers are those in various departments who have volunteered to be involved in the project and produce podcasts for their courses. Finally, we have the students who will be listening to the podcasts.

*2. Selection and Refinement of Evaluation Question(s), based on the Stakeholder Analysis:* Before commencing the evaluations, the questionnaires and the core interview questions will be shown to members of the administration and teaching staff to ensure the evaluation will provide them with all of the feedback they require.

*3. Selection of Evaluation Methodology:* In any evaluation there is the choice between qualitative and quantitative methods. The area of learning technology is inherently multidisciplinary and we believe it is better to choose the evaluation method best suited to the situation instead of sticking to one paradigm. In our case we aim to mix the two, triangulating in order to achieve valid results.

*4. Selection of Data Capture Techniques:* For the students this will mainly be through questionnaires and technical data collection but also some semi-structured interviews and focus groups will be held. Electronic questionnaires are preferred, as they have several data collection advantages: they allow easy data collation when the survey is completed and they allow easier dissemination to a large group of users. Student questionnaires will be anonymous and completed online, however interested students will also be able to volunteer for focus group discussions via a tick-box. The survey forms that we have created also contain questions regarding age, gender and

language proficiency to allow us to determine whether the medium is better suited to certain demographic groups. We will also use technical records available from the podcast servers to create statistics on the RSS subscription rates, the number of downloads per podcast and the location of the requests for the podcasts. Student questionnaires will be carried out at both the half-way point (to allow lecturers to adjust their podcasts) and at the completion of the course.

The evaluation of the lecturer's experience will be through questionnaires and semi-structured interviews. The teaching staff are likely to be more willing to provide feedback on the project, as they will have actively volunteered to be involved in it. Questionnaires will be used to gather basic statistical data and then interviews will be used to allow us to gain a more in depth knowledge and understanding of their experience and issues they had.

5. *Selection of Data Analysis Techniques:* Analysis of tick-box style questions will be performed with standard statistical analysis tools. The written comments from the questionnaires and the recorded interviews/focus group discussions will be combined into a report.

6. *Choice of Presentation Format:* Both a formative and a summative report will be presented to the stakeholders of ProjectPodcast.

## **Conclusion**

The aim of this work was to generate a preparatory evaluation plan to enable us to effectively and efficiently assess ProjectPodcast. From our experiences and that of others we have found that students are reluctant to give feedback on podcasts. To circumvent this we will use closed questions, with tick boxes and conduct the questionnaires using a web based system. This data will be combined with that gathered in the semi-structured interviews and focus groups. The survey will include the lecturers, as they have been overlooked in the past. This will allow for more rounded conclusions on the perceived value of podcasts to be drawn, with perspectives from both the teaching staff and students involved. Finally, positive results will be used to encourage management and funding bodies to continue their support for technology based projects of this kind.

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