

# STUDENT GENERATED PODCASTS: LEARNING TO CASCADE RATHER THAN CREATE

Joseph Maguire, Susan Stuart and Steve Draper, University of Glasgow

## ABSTRACT

There is currently an explosion of exploratory uses of podcasts in education, but only a few where the students, rather than the staff, produce the podcasts. Where it has been done, it has mainly been for students where the technology itself was also relevant to their studies (e.g. computing science or media studies courses). Here however we report on one of these on a course for 'non-technical' students from the faculty of Arts. These students were required to produce a single video podcast for their third-year philosophy course. The requirements to present something useful to fellow students and to master a new and fashionable technology are well designed to augment self-confidence and self-efficacy, to engage students, to equip them with a skill that may enhance their employability, and to foster deeper learning. However a basic reason for student generated content of this kind is that authoring for other students (rather than for marking by a staff member) should give impetus to deeper thought about the content. This would not only cement existing knowledge but also supplement it with new perspectives and considerations. Sceptics might argue differently, claiming it to be a gimmick to boost course numbers. However, crafting a report, essay or regurgitating facts on exam day involve different learning experiences and skills to that of giving a persuasive presentation to a large audience.

Keywords: student generated podcasts, podcasting, educational technology.

## INTRODUCTION

Podcasts, as a free audio or video delivered directly to an iPod needing no more than one-click to activate, have attracted a large and very wide-ranging audience. Naturally, many individuals and organisations now want to make use of this powerful platform and their desire has driven costs down while simultaneously enhancing usability.

The initial barriers to recording, editing and distribution have been broken, and the most popular iPod can now record audio straight out-of-the-box without the need for any additional accessories or software. When the iPod is next synchronised the recording will be automatically transferred to the system where it can be edited in seconds – adding copyright-free jingles and / or sound effects, if so desired. From there, distribution is just one more click away.

The recent explosion in exploratory uses of podcasting in education alone is a prime example. The main focus up to now has been on lecturers recording their lectures, seminars, and laboratory sessions for their classes, a practice proving popular not only with students (Draper & Maguire, 2007) but the general public as well (Wojtas, 2006). There has been investigation into student-generated content but this is often connected with information technology (Frydenberg, 2006), web design (Lee, McLoughlin & Chan, 2008) or media production<sup>1</sup>.

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<sup>1</sup> Assistant Professor at Duke University, Daniel H. Foster used podcasts as part of an exercise in his 'Radio and Theatre of Mind' course.

However, there has been little attention paid to those who are still learning, those future experts, who are disconnected from the world of science and technology. The average Arts student studying divinity, history, literature or philosophy is likely to spend more time poring over ancient texts and penning discursive essays than, say, creating a video podcast.

Prime Minister Gordon Brown is an exception, graduating from the University of Edinburgh with a Ph.D. in History, he recently released a podcast detailing the action he and his cabinet would take in tackling the global financial credit crisis<sup>2</sup>. This significant step not only represents Number 10's recognition of the importance of the platform, but also of the need to spend precious time crafting its content, a content that is not only clear and concise but short, simple and shaped for a wide audience which may not be particularly interested in politics but which is, nevertheless, concerned about the latest crisis.

This is a new medium for powerful and international public speaking, and public speaking is, in its turn, a transferable skill, that many students, not simply Arts students, no longer practise. This could be easily remedied using podcasts. There is no reason why a collection of "digital natives" (Prensky, 2001), such as Arts students, could not construct a small video presentation on a topic of interest to a large diverse audience. Thinking about the content itself, their potential audience, whether publicly available or privately presented to their peers in class, and how it will be presented should all serve to refine a student's critical thinking and presentation skills. In this paper we report an innovative educational case with exactly these features: student-generated podcasts, video rather than audio-only, by philosophy students with no subject-related fascination with or training in modern technology, yet who are presumed to be "digital natives".

We will start by examining the course objectives and how to address them in a suitable assessed exercise. We then consider three potential assessed exercises and their respective outcomes before settling on one for use as a group assignment. The abilities required to successfully complete the exercise are determined alongside the strategies necessary for equipping students with these abilities. Performance on the exercise will be determined through an objective marking scheme that we have designed which not only provides flexibility for the marker but clear criteria for the student. The exercise is then trialled as part of the assessment of a third-year non-technical philosophy course and the feedback produced by the students which is largely favourable. We discuss the potential to repurpose products of the exercise as new learning and recruitment materials, and discuss what might be changed to improve the experience and learning opportunities for this particular class.

#### EDUCATIONAL RATIONALE

This particular learning activity needs to address several issues that are expressed in the course objectives.

1. The content needs to be a critical rehearsal, re-expression, or application of material the students had already covered in the course, with the

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<sup>22</sup> Downing Street Podcast - <http://www.number10.gov.uk/podcast> - 30/10/08

additional aim of deepening understanding rather than covering more topics.

2. Creating material for fellow students is a natural way to frame this. As has long been understood by, for example, Piaget, you expect your teacher to understand what you mean and compress expression in order not to bore her, while peers naturally require fuller and more careful explanation. This is learning by teaching, as in the surgeons' slogan for continuing professional development: "See one, do one, teach one". The traditional university activity for this is the seminar where students in turn present a topic, but the drawback of this method is that it often degenerates with students paying little attention to each other's contributions, and it usually doesn't leave a record that can be re-used by students when it comes to essay preparation or revision. More recent incarnations of this particular genre are Collis & Moonen's student generated content approach [See, for example, Collis & Moonen, 2005 and Spires & Morris, 2008], and "computer supported cooperative lecture notes" in which student teams contribute sections to a class-wide collection of notes on web pages. The latter had been used in earlier courses in this institution.
3. This is also natural to do by means of group work, where each group, rather than each individual, produces a presentation. The discussion within the group is a more immediate peer process with the same virtues for deepening personal understanding. It is also independently worthwhile as a skill valued by many employers.
4. A second major employability skill is communication; and particularly, being able to communicate in multiple formats, not merely by essay-writing or speaking up in seminars and tutorials. Podcasting is a novel medium that, in itself, might be a worthwhile skill under this heading. However, a more general issue, which this exercise was intended to develop, is the consideration of how the medium (the format) can be best used to communicate with the intended audience and the course-specific content.

#### ASSESSED EXERCISE

The assessed exercise has to encompass the four key elements outlined in the previous section: rehearsal of course content, creating material for fellow students, group work, and communication. It needs a simple and elegant distribution platform that is easy to grasp within the limited time available and with the, possibly, limited technical knowledge possessed by the student. Distribution platforms such as cassette or versatile discs are too expensive and complicated for students to grasp in a small amount of time. A cheap and simplistic alternative is a distribution platform which utilises the power of the Internet, for example, YouTube or podcasts. Although YouTube is a popular platform the quality is low, especially text and graphics, and requires a dedicated and fast data-connection. This is not true of podcasts: not only can the audience download content to their device in advance but that content can be of a far superior quality. We therefore chose podcasts as our distribution platform.

The outcome, the video-podcast, is a product for the distribution platform and should be no more than ten minutes long. Although students have only six weeks to complete the exercise, the length of presentation is to force them in to

presenting ideas clearly and concisely. In developing the assessed exercise we considered three possible courses of action:

- introductory course (audio) A ten-minute introductory presentation for the course. The exercise would consist of five episodes or lectures, lasting no more than two minutes each.
- revision guide (enhanced audio) A ten-minute revision guide for a course topic. The exercise would likely consist of two episodes, five minutes each in length, one that focuses on revising lectures while the other would focus on seminars.
- presentation on a course-specific topic of choice (video) A ten-minute presentation on a course-specific topic of choice. This would be a single episode, with the future intention of consolidating all podcasts into a single podcast.

Initially, the first outcome seemed like the best option because it didn't require any significant knowledge or technology to produce and would be useful for future students. Unfortunately, it would only require surface knowledge of most course topics and might present too thin a notion of course content. The second option attempted to address this problem by asking students to focus on a particular aspect of the course and to use appropriate images to emphasise points. This enhanced audio approach would see students synchronise audio with images and offer DVD-style chapters for sub-topics. This would not only result in a product useful to current students but also strengthen existing knowledge in the student producing it. However, there are two foreseeable problems with this approach: (a) specialist knowledge of software, and (b) lack of reflection on the other elements of presentation like, body posture, facial movements, and physical location. We want students to think about the language they use, including their body language, and what they want the viewer / listener to understand at the end of their presentation. This would all be most easily available in the third course of action: video presentation on a course-specific topic of the student's choice.

Option three is slightly harder to achieve than audio but easier than enhanced audio. It is likely that most students will not have the specialist knowledge or software required to produce enhanced audio podcasts but will already know how to produce videos using their mobile phone or webcam and, in many cases, how to edit them using appropriate software. Option three is also the most suitable for mirroring the course objectives and promotes an awareness of audience and importance of appearance.

#### ABILITIES

The assessed exercise can be subdivided into three activities: preparation, production, and distribution. Each activity requires its own unique set of abilities with which each student must be equipped – during teaching hours, i.e. seminars and workshops – if they are to do well.

#### Preparation

Unsurprisingly preparation, in terms of both time and energy, is the most expensive activity within the whole exercise, and it is explained to the students that, if they are to communicate successfully with their audience, they must prepare their chosen topic thoroughly. This should not be too much of a problem; they will have had lectures and seminars on all the major themes, and

they will have been directed towards course- and subject-specific reading and research papers. Furthermore, the notes they will have taken in seminar discussions should provide the perfect foundation for some interesting and energetic discussion and the presentation of alternative points of view. They will also know that, contra Aristotle's belief that the true is always more appealing than the false, these arguments must not only be sound but also stimulate the audience. The aim is to make their presentations persuasive without feeling like a lecture, which is quite a difficult thing to achieve in any medium.

Group work presents many challenges, not least of which is each member finding his or her own rôle in relation to a dynamic set of relationships. This is something that cannot be taught in this, or possibly any other, class; but what the course coordinator can do in this class is impress upon the students that their group is unlikely to strike the perfect balance in its first meeting and, similarly, they must adopt an iterative approach to planning and writing the script for their presentation, starting with a basic outline for their video and fleshing it out over many attempts. They need also to run through their presentation more than once, perhaps even having several dry runs to determine the best format for their final recording.

#### Production

Producing a short ten-minute video presentation with the latest hardware and software will require few new technical abilities. The groups were advised to achieve as much as they wanted with the hardware (for example the camcorder), and avoid the software (the editing suite) as much as possible. The simple reason for this is that editing film is an expensive and complex stage in production, and in this case it would really only mask the project's objective. Avoiding editing, with the exception of, perhaps, stitching together small segments, is entirely possible with thorough planning. The groups attended a one-hour workshop on how to use university equipment, but they were also advised that they could record and edit their video using their own hardware and software, for example, a mobile phone and iMovie. In addition to these workshops each group had open contact to the course convenor to discuss content, and access to one-to-one technical support for up to six hours, during the production stage of their video.

#### Distribution

The distribution platform is podcasts. In order to utilise this platform a simple text file, an RSS feed, is required. The feed contains information about the video such as its title, synopsis and length. The structure of the feed is similar to that of a webpage and requires knowledge of extensible mark-up language or XML and how to use it. A briefing on the basics of this language was outlined at a one-hour workshop. After the initial briefing students were asked to organise themselves into their groups and to write the RSS feed for their video presentation. They were asked to do this using pen and paper while some example RSS feeds were shown on an overhead. The group's efforts were checked, corrected if necessary, and confirmed before the end of the session. This meant students could type their RSS feed with the confidence that it was correct.

#### MARKING SCHEME

The assessment would ultimately be awarded a passing grade of A – D or a failing grade, E – N. The grades are mapped to a 22-point scale outlined by the University. The lowest passing score is nine (D3) progressing upwards to a maximum of 22 (A1). The assessment itself represents 25% of the final course award.

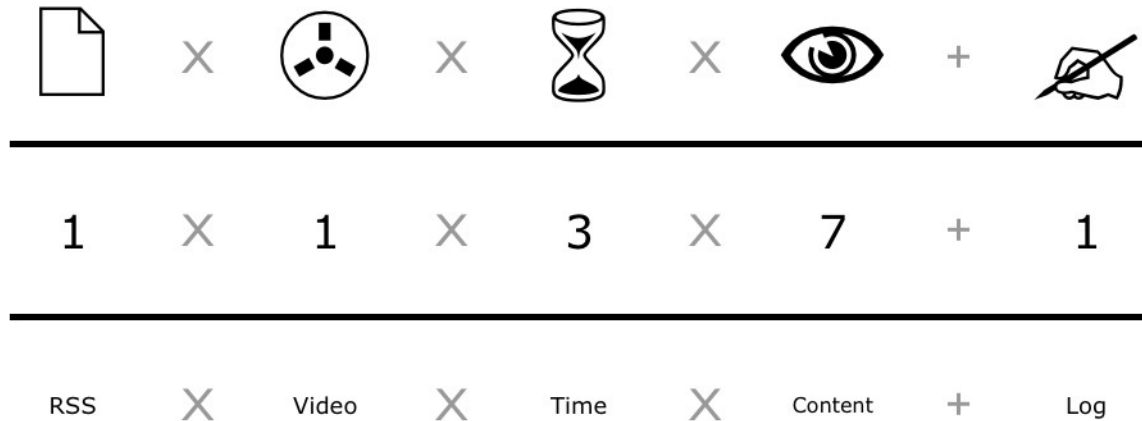


Figure 1: Marking scheme

The final marking scheme was created specifically for the assessment, consisting of five elements: **RSS feed, video file, time-spent, content** and **log report**. The first four components are dependent upon each other, which is to say that, failing to complete one results in failure in all.

Three of the components have a binary score, **zero** or **one**, they are: RSS feed, video and log report. These components are not actually scored but their satisfactory completion is recorded. If a student submits an invalid RSS feed, poorly recorded video, or incomplete log report they will still be awarded one point. However, this is not true if any of these components are corrupted, damaged or clearly neglected. A simple example would be a student spending a reasonable amount of time crafting a beautiful video and log report and submitting both without an RSS feed. The student in this case has submitted a video, not a video podcast. They would score zero for the first component, resulting in  $0 \times 1 \times 3 \times 7 = 0$ , that is, a zero and fail overall. Thus, a student must submit an RSS feed and video. The technical wizardry or competence displayed in either component does not matter, since a student will only be recorded as submitted or not submitted. Students showing forethought will not waste time with visual effects and podcast tricks but focus on the content.

The two remaining components, time-spent and content, are scored in the range zero to three and zero to seven respectively. These components are the most important, and a high score in both will result in a very high score overall.

Ideally a group should work approximately 15 to 21 hours, with each member contributing five to seven hours of their concentrated time. This might be prescriptively divided up into 15 hours crafting content, three hours production and three hours post-production. The time-spent component reflects this 21-hour period but is not rigid. The marker can use their own judgment to assess

time-spent by considering all elements of information within the log report, the storyboard and the scripts.

The content component from seven to zero reflects the grades A, B, C, D, E, F, G and N. Thus, an award of five points is equal to a C. The grade or score for content does not necessarily reflect the final grade. The interplay of components could easily, and did in some cases, increase the final award. A simple example would be a high-score of three for time-spent, five for content and, if we accept all other components have been submitted, this would result in a final award of 16 points or a B2. The interplay between components provides room for the marker to deliver the most appropriate grade while providing confidence and criteria to the student.

#### THE STUDY

A group assignment was set on a third year philosophy course, with 24 students in groups of two or three, to produce a video podcast on a course-specific topic of their choice. The assignment was worth 25% of a student's final course award. The students had six weeks to complete the assignment and were required to attend all seminars and two one-hour workshops, to equip themselves with the necessary skills to complete the exercise. Groups were advised they had six hours of one-to-one technical support from a trained member of staff and had access to state-of-the-art podcast production equipment but were also informed they could use their own equipment. Access to equipment was tightly regulated, with no group allowed access after six hours of use. This was a further attempt to emphasise the importance of planning and content over presentation, but also to maintain a level of consistency in the assistance afforded each group. The groups were required to submit all their scripts and storyboards along with a typed RSS feed, their video in MP4 format and log reports, one for each member of the group. The log report contained several questions, some personal, some feedback, and some aimed at extracting any technical or group difficulties during the exercise. The log report also asked students, if they so wished, to produce a score for their fellow group members along with a justification for that score.

A contingency plan was prepared for use in the eventuality of a complete breakdown in the planned activity. The plan required the module coordinator to film groups presenting their ideas. This recording would then be peer-assessed, both intra- and inter- group.

#### FEEDBACK

Students on the course were initially rather hesitant, as is natural, about embarking on a task for which they had little previous experience. We had assumed that, with the prevalence of mobile phones, video-podcasts and YouTube that they would have been more familiar with video technologies, but in fact they were not. On reflection, we should not have expected anything else because the students in this course had, and continue to have, the same attitude to the creation of web pages, something they also do in a course which runs prior to this one. In the first five years of their undertaking this sort of project their attitudes have changed very little, nearly every student reports experiencing a steep learning curve but also a strong sense of achievement when their group's web-pages are made available to the class and they can learn from one another for essay-planning, revision, and examination preparation.

We assumed that the video-podcast exercise would be more appealing to students because it would tap into, an assumed penchant, for video-recording and editing. The course coordinator had similar feelings, as can be seen from the quote below.

“I thought the dynamical form of giving a short spoken presentation on a topic would be more appealing, especially when it can be adapted and enriched in so many interesting and imaginative ways.”  
Course coordinator

However, actual academic performance and student feedback ran counter to our assumptions. Although the students’ performance was no better or worse than in previous years, products of the assessed exercise rarely embodied the enthusiasm and creativity we had expected and hoped for. Instead groups stayed largely on familiar ground producing, what amounted to video recordings of the individuals collectively reciting essays. This is not to say that there were not moments of inspiration but they were fairly few and quite far between.

The highest scoring group had sat down together and worked everything through to the last detail. They then booked some time in the studio, recorded it all in one go, did some editing, added some backing music, and had the project completed ahead of time. The project had a clear connection to one of the central themes in the course – identity and moral responsibility in cyberspace – and the content was well argued and concise. At the other end of the scale, the group who got the lowest score admitted to not having spoken together about the project before they went to make their recording. Their topic – representation and misrepresentation in space and cyberspace – was vague, they made some drawings (which bore little relation to the project), then scanned the drawings, added them to Keynote and made their video-podcast using slides rather than their own planned action. The course is very rich and stimulating, but this group had thought about the project so little that their recording ran for less than seven minutes and a considerable portion of that was their credits.

It could simply be that our own enthusiasm carried us along and our expectations were set too high, but it is clear that, although our students are no different from any others in their high use of mobile phones for communication, they are not “digital natives”. However, we are not entirely forlorn. Table 1 reveals some interesting points extracted from log-reports. Three things of particular note stand out: (a) all students own a dedicated mobile phone and music player, (b) the majority perform poorly at basic digital tasks such as accessing a wireless access point, and (c) the majority of students enjoyed the exercise.

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Question	Yes	No
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Do you own an iPod?	10	4*
Do you own a mobile phone?	14	0
Do you browse the web on your mobile phone?	1	13
Do you use any of the university's wireless access points?	8	6
Did you enjoy the exercise?	12	2

\*all own Sony brand digital audio player.

Table 1: Interesting questions from the log-report, N = 14.

The students were not only asked if they enjoyed the exercise but elicited what they thought about it in general, some interesting responses:

- "I thought the exercise was really interesting and allowed us to express what we have learned in a different way." Student 1
- "Coming up with a subject was challenging, making and editing was hard work but rewarding and at times, fun." Student 2
- "Good, challenging. Very technical and for people who didn't like technical things... quite hard." Student 3

It is still unclear what students found more challenging: technically producing a video or reformulating content for an audience. The products of their efforts suggest both, but this could be because the assessed exercise introduced two new elements for non-technical students: technical tools and producing content for an audience to assess in terms of its pedagogical worth.

#### REPURPOSING

The videos produced by the groups can be repurposed and used as revision material for students, preparatory material for future students or marketing material for potential students.

#### Revision

There should be little to no effort required in repurposing videos as revision aids. The videos produced by groups should really reflect a revision process by the students themselves. The salient sections of interest and key concepts should be easily extractable and concise. The short ten-minute videos represent the perfect start and end to a study session, and a student could easily refresh a topic of study by watching the video while commuting to the University Library, and before they enter the Library they know the key topics, concepts and relevant papers. They gather their resources, spend some hours reading and can then compare their thoughts and notes to those presented on the video. If they have missed anything or have had an original thought – they can tackle it at the

next study session. Idealistic maybe, but for such a powerful learning resource to be the by-product of an assessed exercise is really quite wonderful.

Unfortunately, the real concern in repurposing videos as revision aids is the quality and value of their content. If all videos are published without using performance as a filter, there is potential for students to have misplaced confidence in videos that are stylish and enjoyable but which lack core content. This may mislead students during a stressful examination period, especially if significant differences exist between course content and that expressed in the video. However, if only the videos scoring 15 / B3 and above are published, we inadvertently reveal a student or students' grade to others, and we breach their right to privacy.

These reasons, amongst others, prevented us from repurposing the videos as revision aids. However, future iterations of the learning design could incorporate advice from Collis & Moonen (Collis & Moonen, 2005).

But perhaps an alternative would be to use the video-podcasts to introduce new students to the course. For this purpose there could be no risk in only using the best.

#### Marketing

Video is a strong marketing resource, far more accessible than a well-written essay. Prospective employers, students, their parents and an increasingly large international audience can see at a glance the quality of learning and teaching at the university, not only through the content of the video but the approaches used as well.

Unfortunately, this strength is also a weakness. Video is far easier to criticise because it is accessible and popular. Whereas literary work is tried, tested and respected as an assessment medium, videos for non-technical subjects are not. This is because too little is known about them in this context by learning and teaching practitioners and there is no reason to expect a different response from the public since they, like us, will need to be convinced.

#### CONCLUSION

In conclusion we should consider the question of whether or not it was a mistake to introduce a significant exercise that was for the students a novel task in both its format and the tools required, and in its nature as a learning activity, with students producing content for a different audience, not just for a teacher to mark. The marks show that many of the student groups focussed on either mastering the technology or on producing intellectually worthwhile content, but not both. However, the higher scoring groups did manage to address both and this might have been because they, other groups had done the comparable webpage exercise in a previous course – one of these students even reported that they had “really enjoyed this course especially the opportunity to create a web-page and a podcast which is invaluable knowledge I can take into any job I may have in the future.” This suggests that students need practice at this learning activity, just as with most others, but that they improve rapidly with practice: unique, unrepeated types of assessment lead to generally poor results. Given the employability-related learning aims of exercising communication skills

and especially in multiple formats, then introducing more such exercises rather than dropping them would seem to be the way forward.

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