

Routine Podcasting for Revision and Consolidation: Enhancing Native and Non-native English Speakers' Learning

Teaching with New Technologies Award Scheme

Final Report

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1 Summary

The aim of this project was to evaluate the use of routine podcasting of lectures as an enhancement to student learning. Audio and enhanced audio recordings of all theory-based sessions throughout a module were made available to students to allow them to revise and consolidate theory. Evaluation was used to determine if the recordings have helped both native and non-native English speakers, as well as determine the opportunities for such routine recording across the wider student and staff population.

The project was split into three phases:

1. Trial podcasting for a module to evaluate technologies and student use: Autumn 2007.
2. Student perceptions survey to evaluate potential for take-up: Spring 2008.
3. Staff perceptions survey to evaluate potential for production: Spring 2008.

During the Autumn semester 2007-2008, we routinely recorded the audio and screen output of the theory-based lectures on the Department of Computing's CSM21 Strategic Information Management masters module, with 22 students enrolled, the majority from overseas. The resulting audio and enhanced audio podcasts can be found at:

<http://www.computing.surrey.ac.uk/teaching/current/csm21/>

To record these sessions, widely available free software was used, which after a few sessions became routine to use. The biggest expense in recording was the amount of time and intervention required to convert the audio and video into the podcasts. If a routine approach was to be adopted by the University, then the support for this would have to be carefully considered with the aim of reducing the knowledge and time required to release the recordings. Suitable software and hardware would obviously have to be invested in, and in particular an effective means of storage and distribution of the podcasts.

At the end of the module, the feedback from the students was that the majority had used the podcasts occasionally, with 4 using them regularly. In general, the students felt that they were useful for understanding the detail of the material being presented better, especially for revision, although no specific examples were given. Approximately half the class used the podcasts because English was not their first language. Despite the clear use of the podcasts if students missed a lecture, there was no apparent reduction in class size.

During the Spring semester, both students and staff were surveyed to gather their perceptions on the routine recording of teaching activities. The results from this survey enhance the conclusions drawn from the module evaluation. Here, providing routine recordings was perceived to help students to work at their own pace, catch up on material missed, take better notes, revise and support special needs students. However, while students would prefer the use of routine recording, staff felt that only audio recordings for special events, such as guest lectures or student presentations would be important, although the majority of staff surveyed were unwilling to make recordings if resources were available.

One clear message from both students and staff was that they valued contact time and did not think that recordings would be better than attending lectures, or that they would cause a drop in attendance. However, staff also had significant concerns regarding privacy and how routine recordings might be misused as a management tool.

2 Background

With the advent of convenient audio and video recording technologies, such as mobile phones and laptops, students are now routinely recording lectures to help with their learning. Anecdotal evidence within the Department of Computing has shown that such ad hoc recordings have been used successfully as a revision aid, while allowing students who miss lectures to catch up. For example, one masters student from the 2006-2007 cohort recorded video of particular lectures she attended for her own revision studies. She then passed these recordings on to a colleague who missed lectures because of his part-time job.

Although such recordings should not be considered as a replacement for lectures, they may be used to enhance the learning experience. Distributing recorded content has been piloted at a number of institutions internationally, and has even become established as a routine enhancement to delivery. For example, Malan [1] evaluated the use of recording lectures and distributed them as podcasts for Computer Science at Harvard. He reported that 45% of subscribers used the materials for review purposes. In contrast, some institutions are exploring the use of supplementary material, such as audio glossaries and animated tutorials [2] and interviews [3]. Exploration of such activities at Surrey has also started [4].

While there appears to be good evidence to support the use of lecture recording as a revision aid, there is also the question of whether such recording can also be used to support students whose first language is not English. Surrey has a high proportion of overseas students, particularly on masters programmes. Having the opportunity to review, play and pause a recording may therefore be beneficial for these students, especially if they wish to translate words and phrases to aid understanding.

Beyond the possible pedagogical reasons for recording lectures and distributing them for revision and/or consolidation of concepts, there is also the need to make the recordings routine, easy to carry out, and quick to distribute. Without this, the benefits that may be gained from such activities are quickly lost if the distribution of the materials is delayed beyond which they are useful. Malan's [1] approach advocates the routine recording of audio and video into commonly available formats (MPEG 1 Layer 3, commonly known as MP3 files, and MPEG 4, specifically MP4 and M4V files), then distributing these via podcasts. Others have a similar approach using easily available software tools [2]. This is in contrast to more intensive video approaches that need dedicated video streaming sites (cf. [5]). Although full video recordings of lectures may provide a richer off-line experience, the overheads on setting up appropriate equipment and converting video files are greater, and do not compare well with simple audio or screen capture technologies.

In this project, we evaluated the routine recording of theory-based lectures for a masters module, which had a high proportion of non-native English speakers. The hardware, software and ease of production requirements of podcasting are evaluated, together with the effectiveness of the recordings to aid consolidation of concepts in the short term, and their use as a revision aid at the end of the module, with native and non-native English speakers. We also evaluated the student desire for such recordings and their possible uses across different subjects, together with staff perceptions of such recordings.

3 Technologies

Following advice from the e-Learning team, audio and screen output was captured digitally using a remote lapel microphone and the freely available software. The digital recordings were then converted to MP3 and M4V files and distributed via the Department's webpages both as links to individual files, and as iTunes podcasts.

Two computers were used to capture and process the media files. First, a laptop connected to the remote lapel microphone was used to run the Microsoft PowerPoint presentations for the lectures, with CamStudio 2.0 and the CamStudio Lossless Codec 1.0 [6] used to record each session. Second, a desktop computer was used to convert the transferred video into MP3 and M4V files. RAD Video Tools [7] was used to strip the audio from the source video file, Videora iPod Converter 2.09 [8] was used to convert the video (requiring the codec) to a

MP4 file, and iTunes 7.4.1.2 [9] was used to convert the audio into an MP3 file and video into an M4V file (iPod compatible format). RSS XML files were edited using a text editor. The converted files were then uploaded to the Department's webserver.

The capture lifecycle consisted of the following processes and software:

1. Lecture slides and audio captured with CamStudio and Lossless Codec. Files saved on laptop (approximately 700MB per 50 minute session).
2. Captured video files transferred via wireless network to desktop.
3. Audio stripped from video using RAD Video Tools.
4. Audio converted into MP3 file (approximately 20MB) using iTunes (128kbps) with artwork.
5. Audio RSS XML file updated with new title.
6. Video converted to MP4 file using Videora iPod Converter.
7. Video converted to iPod using iTunes into M4V file (approximately 40MB).
8. Video RSS XML file updated with new title.
9. Updated XML and new MP3 and M4V files uploaded to webserver.
10. Webpage HTML updated to link to new audio and video files.
11. Links, audio, video and podcast feeds tested.

After the first few sessions, this process became routine. However, for up to three 50 minute sessions, the processing time from steps 2 to 11 took up to 2 hours. File sizes were the main problem as each 700MB file required longer to copy and convert. Occasionally there were problems with the Videora iPod Converter software which would corrupt the video output requiring the pre-conversion of files to use a different codec prior to MPEG 4 conversion.

While this process is ad hoc, it does demonstrate that effective results can be obtained using existing equipment, free software and an appropriate amount of time (the biggest cost). Any longer term adoption of this would need a simpler conversion process that reduced the required intervention and technology expertise. Software does exist to achieve this – further investigation is required.

Lastly, it is worth noting that, given the use of RSS podcast feeds, it is not feasible to place this material in ULearn. It is possible to host these via ULearn's public preview page for a section, but this is difficult to reference. This means that, with all other module resources in ULearn, the podcasts remain separate and are therefore more difficult to control.

4 Student Evaluation of Module Podcasts

The CSM21 Strategic Information Management module ran throughout the Autumn semester 2007, timetabled from 2:00pm to 4:50pm every Tuesday from week 3 (September 18th) to week 12 (September 20th). For each theory-based session, recordings were made. Group exercises, discussions and coursework presentations that occurred regularly during this period were not recorded. The podcasts resulting from these recordings were made available either the following morning, or at the latest on the Thursday morning of the same week.

Taking the module were 22 masters students from a mixture of backgrounds, the majority of which were non-native English speakers. While each session had a minimum of approximately 18 students attending, there was at least one student in each session who did not attend. Feedback received after the first week of running the podcasts was encouraging, with one overseas student noting that he "had problem yesterday in understanding parts of the lecture maybe because [he has] no background in management & business or [has a]

problem in the language as English is not [his] first language". He added that he had "listened to the recorded lecture for the last week and [has] understood it very well."

During the last timetabled session (scheduled for revision), the use of the podcasts was evaluated through a focus group session. During this session 16 students attended, who were split into four groups of four people to answer prepared questions in groups after discussion. The results are summarised below.

1. How and when have you use the podcasts?

Please record the number of people using the podcasts occasionally versus regularly.

The majority of people stated occasional use of the podcasts, four stated regular use to "clear any misunderstandings", and only two reported that they did not use the podcasts.

Consider if you used them when they became available, later on (within a few weeks), or have used them recently (or will do) for revision.

Those that used them regularly did so within a week of upload. All stated that they would use them for revision.

Consider how you played the files. Include which software you used to play them, whether you only played the audio or enhanced audio files. Did you play them only on your PC, or via an MP3 player, etc?

All stated that they used the enhanced audio files on their PCs with a mixture of Windows Media Player and Quicktime. Only one group stated that they used their MP3 players to listen to the recordings.

Consider the files themselves, such as the appropriateness of their formats (MP3 and M4V), and file sizes.

All stated that the file formats were appropriate, especially MP3 files.

2. Why did you use the podcasts?

Consider if you used the podcasts to go over the material again soon after the lecture to help consolidate the concepts being taught.

Here there is a mixture of opinion. Two of the groups stated that they did not use the podcasts soon after the lectures. The other two groups used them to make "sure nothing was missed during the lectures", to refresh "memory of concepts taught" and to "clarify/double check understanding".

Did you use them to help with the understanding of the English? Perhaps you used them because you could pause the sessions to help look up terms?

Similarly, the same two groups who did not use the podcasts soon after the lectures did not use them to help understand the English better. In contrast the remaining two groups used them to help improve their English "to some extent", noting however that the audio was unclear at times.

Did you use them because you missed a session?

A unanimous yes.

3. How did the podcasts help with your learning?

Consider if they helped you to understand particular topics. How did they help? Try to give examples. Which ones didn't help?

Here again, the consensus was that the podcasts were used to refresh their memories, particularly "all topics" for one group. No specific topics were highlighted otherwise.

Did they help you to understand certain concepts better to obtain a deeper understanding of the topic, or were you more interested in remembering details?

One group thought that they obtained both a deeper understanding and better recall of details, while the remaining groups all thought the podcasts helped on details only.

Did they help with the assignments? How?

No. Note that the assignment was a group based review of four separate subjects (one per group) in which the recordings could have helped, but were not used.

4. How do you think recordings could be used in the future?

Consider whether recordings should be routine, whether they should include video and if the focus of them should be different (for example, discussions rather than theory).

Again the groups were unanimous that the recordings should be a routine part of the module for all lectures, especially since “they are very good for revision”. Here, this includes both theory and discussions, although it was clearly stated by one group that videoing the class would be an “invasion of privacy” (their underlining).

There was some thought that video was unnecessary, although one group noted that the bit rate of the videos should be improved so that the notes could be read on screen during playback (some of the details were hard to see, although electronic copies of all the notes were available).

If video was to be included, would you be willing to be videoed as part of the session, say during a discussion, or do you think that is inappropriate?

Following on from this, if video was to be used, the clear message was that only the lecturer should be videoed and not the class. (Only one appeared willing.)

Should they be produced in any different formats?

Apart from the one “yes”, but with no suggested format, the rest agreed that the formats were fine. Given the technology background of the class, one group suggested that “people can convert the files in whatever type they like”.

We can draw three conclusions from these responses:

1. Having made recordings available, routine podcasts produced within one week of a session are seen as desirable, if not an expectation. Here, audio recordings in MP3 format appear sufficient, the majority for PC use, some for MP3 players.
2. A clear use for the recordings is for revision, especially in going over particular details. Some also used the recordings to overcome language barriers. All would use them if they missed a session. (Note however that there was no apparent reduction in class size resulting from the availability of recordings, although the sample of one module is insufficient to provide a definitive conclusion here.)
3. If videos of sessions were made, then these should be restricted to videos of the lecturer only, and not the class.

5 Student and Staff Perceptions

To assess the wider potential impact of lecture recording and distribution, students and staff across the university were surveyed on the use of such technologies. Both groups were surveyed separately with a near identical questionnaire to enable comparison of perceptions. The questionnaire consisted of five sections asking respondents to rate their agreement against related statements on a 5-point Likert scale, four free form questions, together with five questions asking about devices they used and personal information. A summary of the results is presented in Appendix A. For the Likert ordinal scale questions, in the following analysis the mode and number of responses will be discussed (and where appropriate, the median).

The student surveys were carried out in person on campus in a range of locations between the 1st and 13th May 2008, with 119 respondents who reported that they were from FAHS (26), FEPS (66), FHMS (9) and FML (12), leaving 6 unknown. In total there were 63 staff respondents against a potential 1055 from an all (academic) staff e-mail, with the majority of (59) captured on-line between the 14th April and the 21st May 2008, and the remaining (4) at the University's Learning and Teaching symposium on the 7th March. Of these, they reported they were from FAHS (15), FEPS (19), FHMS (13), FML (9) and Other (1), leaving 6 unknown. Overall each faculty was represented, albeit FML being slightly underrepresented against its overall population, and either students or staff from each level, although the majority of students were full-time (110) from level 1 (30) or level 3 (64).

For each question, the following provides a summary of the detailed results:

1. Consider if you already record some of your university activities

This section was used to determine the current level of recording that is carried out. Respondents were asked to rate their agreement with statements referring to whether they currently record different activities, how frequently, whether they share these recordings and whether they use other people's recordings. The results indicate strongly in general that neither students (mode 5) nor staff (mode 5) currently record or use other recordings. However, with on average 9 (8%) of the students and 4 (6%) staff reporting that they agree or strongly agree that they record activities (6 students and 3 staff on a weekly basis), and with 12 (10%) and 6 (10%) reporting that they share and use recordings, there is at least a small if significant portion of the University that uses recordings.

2. Give an example of why and how you have used a recording, if any

Students reported that they would use recordings for revision, to catch up on material they missed during a lecture (whether they attended or not), of their own presentations (for example, coursework), to record meetings with supervisors, to provide examples from the teacher (dance), and for special needs (such as dyslexia). Some staff added that they would use recordings for research (music), as well as to record lectures and to give presentation feedback to students.

3. Consider whether the University should make recordings, and for what types of activity

Here there was clear disagreement between the two groups for specific areas. The students thought that lectures, seminars and tutorials should be recorded (mode 2), whereas staff strongly disagreed (mode 5). Similarly, students felt that the recordings should be routine and made available within a day of the event (mode 2) and not at the end of semester for revision (mode 4), but with staff again strongly disagreeing. However, both students and staff agree that neither meetings with supervisors nor with other students should be recorded (mode 4 and 5 respectively).

Responses for frequency of recordings varied, with students wanting routine recording (mode 2). In contrast staff agreed that recordings should take place for special events only (mode 2), were indifferent for occasional recordings (3 each), but strongly disagreeing on anything more frequent, such as once or more than once per week per module (mode 5).

One extra question asked of staff was whether they would be willing to record their teaching activities if facilities were available. Responses varied across the 63 respondents to this, with the mode strong disagreement. However, 17 appeared willing versus 33 unwilling.

4. Give an example of any special recordings that you think should be made available (for example, audio glossaries or example presentations)

Although the number of responses to this question was lower for both groups, there was some agreement as to the types of special recording. Guest lectures and example student vivas were mentioned by both a number of times. Apart from normal lectures though, the only other notable examples were recordings for repertoire (music) and audio glossaries/terminology, especially to help with revision.

5. List particular topics that you think would benefit from recordings

Looking at the (low number of) cited examples, the key themes from the suggest topics from students were lectures (core and revision), anything with debate or discussion, where the lecturer talks more than there is available material (slides), topics with less background detail available (new advances), details written on the board or OHP (including calculations), and demonstrations (particularly music or dance). Staff had little else to offer than guest lectures and difficult topics.

6. Consider what type of recordings should be done

Overall the majority are in favour of audio recordings with only staff contributions (mode 2 for both groups). Students were in favour of all available types of recording, including screen capture and video, whereas staff were strongly against video. Interestingly, students were in agreement with including their contributions in both audio and video (mode 2) contrary to the findings of the focus group for the CSM21 module.

7. Consider why recordings of a lecture (or other activity) should be made available

Both groups agree that recordings are not as good as being in a lecture and are not as easy to learn from (mode 4 for students versus 5 for staff). Both also agree that recordings are another tool for learning, good for distance learning and for those who do not have English as their first language (mode 2 throughout). Interestingly, both groups also disagree strongly that recordings could replace lectures, showing that both students and staff value contact time.

8. If routine audio, enhanced audio or video recordings of lectures (or other activities) are made available, consider how this would help you (your students) with your (their) studies

Here, both groups agree (mode 2) that recordings would allow students to work at their own pace, catch up on material missed (students strongly agreed) and take better notes. The students also felt (mode 2) that recordings would help them with facts, concepts, coursework and announcements. Staff disagreed (mode 4) with students (mode 2) that recordings would help if the lecturer was unclear. In contrast to the hypothesis and previous responses that recordings would help with English, students were indifferent (mode 3) and staff were mostly undecided (mode 2, but median 3 with 24 agree responses versus 23 neither agree nor disagree). However, since the questionnaire did not survey whether respondents were proficient in English, no conclusion can be drawn from these results.

9. Give an example of how you think a recording might help you (your students)

A variety of examples were given in response to this question. The key themes are to help with pace of learning, so that the student has the material when they need it, particularly to help with note taking and for revision, but also to rewind on concepts to aid understanding as well as English. Catching up on missed lectures was a common example, but so was the use of recording to recall material that was presented early in the programme. Skills based training was another example.

One member of staff considered using edited versions of their lectures from the previous year as a resource so that they could focus their contact time on group-based activities instead, perhaps like the peer instruction ideas of Eric Mazur [10].

General comments

As well as responses to each individual question, staff in particular provided additional comments. The majority of these were as responses to the free form questions, some via e-mail, while one professor took it upon himself to telephone and rudely give his opinions as to what he thought of the questionnaire. (Here I will freely admit I am not a social scientist, but neither do I deserve such unprofessional behaviour from a senior member of the University

who made some poor assumptions.) Regardless of his approach, his comments have been included, with the key elements of his and others represented below:

The questions in the questionnaire are biased toward a positive response to wanting to record.

Here we note that the responses from staff very clearly show a negative response (question 3) with strong disagreement on recording of activities, overcoming any potential bias.

Recording of lectures could be used as a management tool or teaching metric to identify poor lecturers in a climate with poor morale and the possibility of remedial action (and even redundancy).

This was mentioned several times by different staff. One student even said “examples of poor quality lecturers could be shown to [the] course director as proof of poor feedback.” Clearly any use of recordings would need careful evaluation to ensure they were used for positive pedagogical reasons only.

“I would consider it an infringement of my personal privacy to have recordings of myself stored and downloaded onto other people's computers. I would refuse to be recorded. I believe I should have ownership of images of myself and recordings of my own voice, and should have the power to determine when and how these are used.” Other staff commented that recordings could end up on YouTube where their presentations or old jokes could be ridiculed.

Privacy, copyright and access were important topics raised by staff that have not been dealt with in this evaluation. Whereas ULearn seems an obvious repository for teaching resources with appropriate controls, it would be difficult to include podcasts (RSS feeds) within ULearn, although the files themselves could be included given sufficient storage capacity.

“For me the prospect is horrifying. I think routine recordings would discourage students from reading. This is already a problem and I think it would make the situation worse.” “Recordings can be a strong de-motivator for students and should be handled carefully.” Routine recordings could lead to fragmentation of the student community, encouraging a culture of non-attendance and academic 'grazing'. “Recordings should only be available to enable a student to actively be involved in writing up and conceptualising what they are taught in lectures, so therefore recordings do need to be approached the right way in this regard.”

The focus of this study has been on the routine recording of materials in order to evaluate whether this has a benefit, and whether it is desired. The results show that there can be benefit derived from routine recording without impacting on attendance or motivation, however this has been only a limited study on the potential effects. In contrast, other studies have looked more closely at specific podcasting materials. To understand whether the concerns raised here are justified, a large scale trial of routine podcasting would be needed.

We can draw five conclusions from these responses:

1. Approximately 10% of students and staff currently record in some way, assuming that the sample taken is sufficiently representative.
2. If routine recordings were made, this would allow students to work at their own pace, catch up on material missed, take better notes, revise, provide examples, and to support special needs.
3. Looking at the common ground between both students and staff, they agree that audio recordings should take place at least for special events, such as guest lectures, example vivas or demonstrations, or student presentations for feedback.

Despite this agreement, the majority of staff were unwilling to make recordings if resources were available.

4. Both students and staff value contact time and do not think that recordings would be better than attending lectures, or that they would cause a drop in attendance.
5. For staff, the use of recordings needs to be carefully considered for privacy and copyright, as well as the potential to misuse them as a management tool.

6 Conclusion

This study has evaluated the use of routine recordings of lectures to determine whether they can enhance student learning. Through a module evaluation and wider student and staff surveys, it is clear that there are opportunities to adopt a more systematic approach to recordings.

The recordings made for the module CSM21 demonstrated that the students gained something from their use, whether they were confident or not with English. All stated occasional use of the podcasts with clear agreement that they would be useful for revision (although the mean mark went up to 62% from 58% last year, this is not evidence to suggest that the podcasts were better for revision, particularly since this year's cohort appeared to have a higher entry standard). However, when probed as to which topics the students found the recordings most helpful with, they did not provide any particular examples. Perhaps we can therefore conclude that such routine podcasts are a nice additional resource for learning, especially for some including non-native English speakers, but are not an essential resource with a strong student desire. A wider evaluation may determine this.

The responses to the student and staff perceptions survey identified some key topic areas and events for which there is a stronger desire for recordings. These include special events, such as guest lectures. While students stated that they would prefer routine recording, staff are unwilling, despite both groups identifying how such recordings would help with student learning in a number of ways. The questionnaire was not designed to identify what reasons against routine recording might exist (only that they exist), although staff very strongly cited issues with privacy and the potential to corrupt recordings for use as a management tool.

If a more wide-scale or systematic approach to podcasting was to be considered by the University, then additional evaluation would be needed to follow on from this study. This evaluation would need to focus further on the routine type of activity that would benefit from recording (as opposed to the more specialist recordings being made successfully in other projects). A significant aspect of such a follow-up project would be the need to consider privacy and data protection issues with recordings to prevent their misuse, as well as an appropriate technological framework to automate production while maintaining security. However, most agree podcasting is here to stay in higher education, and more routine recording is already gaining a bigger presence in higher education [11], which Surrey cannot afford to ignore.

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Appendix A – Summary of Questionnaire Responses

Summary of the student (and staff) perceptions questionnaires, showing mode, median, inter-quartile range (IQR) and response rate.

	Student				Staff			
	Mode	Median	IQR	Responses	Mode	Median	IQR	Responses
1. Consider if you already record some of your university activities								
I already record lectures	5	5	1	113	5	5	1	63
I already record seminars	5	5	1	112	5	5	1	62
I already record tutorials	5	5	1	113	5	5	1	62
I already record meetings with my supervisor (students)	5	5	1	113	5	5	1	62
I already record meetings with other students (just between students)	5	5	1	112	5	5	1	62
I record these activities on a weekly basis	5	5	1	111	5	5	1	62
I share what I have recorded with other students	5	5	1	110	5	5	1.75	62
I have used recordings made by other students	5	5	1	110	5	5	1	59
I have used recordings made by staff	5	5	1	110	5	5	1	62
2. Give an example of why and how you have used a recording, if any *				58				21
3. Consider whether the University should make recordings, and for what types of activity								
The University should record lectures	2	2	1	119	5	4	2	63
The University should record seminars	2	2	1	117	5	4	2	62
The University should record tutorials	2	2	1	119	5	4.5	1	62
The University should record meetings with my supervisor (students)	4	3.5	1	118	5	5	1	61
The University should record meetings between students	4	4	1	118	5	5	1	61
Recordings should be made for special events only (for example, student presentations or guest lectures)	3	3	2	119	2	2	1	63
Recordings should be made occasionally (for example, two or more key lectures or seminars per module)	3	3	2	119	3	3	2	62
Recordings should be made once per week per module	3	3	1	118	5	4	1	62
Recordings should be made more than once per week per module	3	3	1	119	5	5	1	63
Recordings should be made routinely so that the exception is not to record	2	2	1	119	5	5	1	63
Recordings should be made available within a day of the activity taking place	2	2	1	119	5	4	2	62
Recordings should be made available within a week of the activity taking place	2	2	1	119	5	3	3	62
Recordings only to need to be made available at the end of semester for revision	4	4	2	119	5	4	2	63
(If the facilities were available, I would like to make recordings of my teaching activities for students)					5	4	3	63
4. Give an example of any special recordings that you think should be made available (for example, audio glossaries or example presentations) *				53				19
5. List particular topics that you think would benefit from recordings *				51				18

Routine Podcasting for Revision and Consolidation

	Student				Staff			
	Mode	Median	IQR	Responses	Mode	Median	IQR	Responses
6. Consider what type of recordings should be done								
Audio recordings	2	2	1	117	2	3	2.5	59
Audio and screen capture recordings	2	2	2	116	3	3	2.25	60
Video recordings	2	2	1	118	5	3	3	60
Audio recordings should include student contributions as well as staff	2	2	1	117	2	3	3	60
Video recordings should include student contributions as well as staff	2	2	1	117	3	3	3	61
7. Consider why recordings of a lecture (or other activity) should be made available								
Recordings are just as good as being in a lecture	4	3	2	116	5	4.5	1	62
They are easier to learn from than attending a lecture	4	3	2	115	5	4	1	62
They are another tool I can use to help me (students) learn	2	2	1	115	2	2	2	61
They are good for distance learning programmes	2	2	1	115	2	2	1	61
They are good for people who do not have English as their first language	2	2	1	115	2	2	1.75	62
They would mean I (students) would not need to attend lectures	5	4	2	115	5	4	3	62
8. If routine audio, enhanced audio or video recordings of lectures (or other activities) are made available, consider how this would help you (your students) with your (their) studies								
They would help me (students) understand facts or definitions better	2	2	0.5	115	3	3	2	63
They would help me (students) understand concepts better	2	2	0	115	3	3	2	63
They would help me (students) if the lecturer was unclear	2	2	0	115	4	4	1	63
They would allow me (students) to work at my own pace	2	2	0.5	115	2	2	1	63
They would allow me (students) to catch up on material I missed	1	2	1	115	2	2	1	63
They would help me (students) to take better notes	2	2	1	114	2	3	2	63
They would help me (students) revise for exams	2	2	1	115	2	3	1.5	63
They would help me (students) complete coursework	2	2	1	115	3	3	1	62
They would help me (students) remember announcements	2	2	1	115	3	3	1	62
They would help me (students) to understand the English used	3	3	1	115	2	3	1	63
They would help me (students) achieve higher grades	2	2	1	115	3	3	1	63
9. Give an example of how you think a recording might help you (your students) *				75				24
10. If any, what type of audio or video device do you use to listen to recordings								
None				28				20
Portable audio player				46				16
Portable audio and video player				21				7
Audio capable mobile phone				15				2
Audio and video capable mobile phone				14				4
Laptop PC				62				30
Desktop PC				33				27
Other				3				2

Routine Podcasting for Revision and Consolidation

	Student				Staff			
	Mode	Median	IQR	Responses	Mode	Median	IQR	Responses
11. If any, what portable recording devices do you use to record activities								
None				58				30
Portable audio recorder / dictaphone				18				17
Audio using a mobile phone				14				2
Audio and video using a mobile phone				11				1
Audio on a laptop PC				13				5
Audio and video on a laptop PC				11				3
Video camera				16				8
Other				0				1
12. What level are you studying at (At which levels do you teach)								
Level 1				30				36
Level 2				3				38
Level P				0				20
Level 3				64				43
Level 4				7				20
Taught masters				8				45
MPhil / EngD / PhD				2				40
Other				0				3
13. How are you (your students) registered for your (their) studies								
Distance learning				0				9
Part-time				1				28
Collaborative				1				9
Full-time				110				61
Other				0				0
14. Which Department are you from (consolidated into Faculties) #								
FAHS				26				15
FEPS				66				19
FHMS				9				13
FML				12				9
Other				0				1

Likert ordinal scale responses are encoded as numbers with 1 as “Strongly Agree”, 2 as “Agree”, 3 as “Neither Agree nor Disagree”, 4 as “Disagree” and 5 as “Strongly Disagree”.

* For free form questions only the response rate is shown. Examples are provided in section 5. All the data can be obtained from the author.

The responses to which department are the students or staff from varied significantly from programme name to faculty. The responses have therefore been consolidated into faculties.