



PTAS Project Report (for REGULAR PROJECT GRANTS)

Project Title: Are teaching resources and lecture recordings equally useful to domestic and international students?

Project type (delete as appropriate) :

A Research Project (research focus on particular dimension of teaching, learning, assessment)

Principal Investigator : Dr Alan Jaap
Schools/department : Medical School

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Project teams must submit a report within 4 months of the conclusion of their project. Copies of dissemination material (eg journals/newsletter articles, conference papers, posters should be listed and attached (separate to the word count). The brief report will be published on the IAD web pages.

Report (maximum 1500 words)

What did you do?

We conducted a qualitative study aimed at understanding the experiences of domestic and international medical students and staff members when making use of lecture recordings. We conducted six semi-structured interviews and three group discussions with participants. Thematic analysis was used to identify patterns in the data, and to code that into clusters of meaning. One of the aims of the study was to explore the potential of these tools to cause differential attainment (DA) in the students' performance.

Participants' experiences with lecture recordings highlight perceived benefits and challenges of using such tools as learning/teaching aids, as well as a discussion about their context of use, and potential improvements.



What did you find out?

Benefits

Among the benefits discussed by both staff and students, the most common was the use of lecture recordings to enhance or complement students' learning practices, such as revision, clarification purposes, and especially learning in their own time.

Staff participants perceived lecture recordings as an accessibility tool, which can be useful for students who may struggle to learn, e.g. those with learning adjustments. The provision of lecture recordings was seen as reassuring and conducive to better engagement by all students interviewed, as they discussed that they can immerse themselves in the lecture experience rather than struggling to take notes while listening and trying to understand the taught material at the same time.

With regards to international students, participants noted that recordings help to overcome potential language barriers (e.g. difficulty understanding the Scottish accent or fast speech), as they can be slowed down or paused. As a domestic student described it, recordings may "benefit disproportionately international students." However, when asked whether they always understand the lecturers' speech, they also admitted that especially when they have international staff teaching, they might struggle as well. This reinforces the benefits for both groups of students.

Staff members also discussed the use of recordings as facilitating efficient use of their time, particularly when the same lecture was repeated multiple times each year - "it would be brilliant, you can record your lecture, maybe do it once a year, and it's done. In medicine that's useful because then it could mean that there's more time on the wards." While the previous benefits have been reported in the wider educational literature, time efficiency appears to be more specific to medical education, potentially allowing staff to devote more time to clinical teaching.

Challenges

Among the drawbacks mentioned by participants were students' potential loss of interactivity or engagement with staff resulting from reduced attendance at live lectures. This appeared to be the perception of all staff members and most students; however only one member of staff mentioned that he had actually noticed significant drops in attendance. This perception seemed to be the main reason for academic staff's reluctance to record lectures.

Practical issues such as the microphone malfunctioning were discussed by the majority of participants. The lack of mobility of recordings (ie. the fact that they are not downloadable) was also mentioned as a drawback in view of a resultant reliance on internet connectivity, which may not always be facilitated, especially when the students are away on placement or in certain clinical areas.

From the staff point of view participants noted the time investment needed to prepare a lecture recording, namely the time dedicated to delivering the lecture, as well as to check whether it is suitable for use afterwards. The fear of failure was also mentioned in connection with potential technical issues, as well as a lack of time on behalf of busy clinicians to ensure that the necessary recording equipment is provided and functional. Staff raised anxieties about using slides that may contain patient identifiable information, and uncertainty about the students' use of such material if



they were to be recorded. However, a student described a lecturer pausing the recording in this situation. This was offered as a solution to using recordings in areas such as Anatomy, which are currently never recorded due to statutory requirements.

With specific reference to international students staff mentioned that use of recordings might impact on the students' interaction with peers in English, with a potential loss of collegiality. However, that assumption was not supported by observation.

A general sense of confusion about what happens with the material once the lecture is recorded was apparent in the interviews with both staff and students. Finding the recordings was highlighted as a potential issue, as well as the lack of information about what lectures would be recorded, when or whether that material would be made available online.

Usability

The lack of guidance on navigating the platforms was mentioned by several participants, indicating that exploring such resources is primarily self-directed and "through trial and error." This was mirrored by staff uncertainty of content curation and management after recording a lecture, making the process of finding recordings cumbersome for the students.

Context of use

Alternatives or additional tools were also discussed in relation to supporting more interactive teaching styles e.g. eLearning modules which involve a mixture of quizzes as well as information provided on slides, and the Top Hat question-answering system for in-class participation.

Improvements

Lastly, a series of improvements were suggested. Teaching staff would like to be able to collect feedback on students' use of recordings to increase their understanding about how students use them and how to best employ such resources as part of their teaching practices. They also mentioned rewarding student usage (e.g. by issuing certificates of participation),

Students raised the possibility of including a captioning system which could be particularly useful for international students especially when unfamiliar technical terminology occurs in lectures

Staff suggested provision of supplementary material to the recordings might be helpful for students, such as a list of takeaway messages or tags to help locate particular sections of the recording for review. Both staff and students reinforced the need for guidance about access to resources after the material is uploaded, for instance, consistency about which sessions would be recorded how they would be tagged, as well as when, and where they would be available.

Based on our findings we are developing guidance notes for the use of lecture recordings with a particular emphasis on the use of identifiable or otherwise sensitive material – which present a significant challenge for the use of lecture recordings in a medical education context.

How did you disseminate your findings?



We have circulated the findings to relevant local groups and discussed results with year directors where appropriate. We plan to incorporate these findings into future publications on improving higher education for international students.

What have been the benefits to student learning?

We have confirmed the utility of lecture recordings and online resources in our context. Importantly, no substantial barriers for international students have been identified that are *specific* to lecture recordings, which might have complicated the expansion of similar resources.

How could these benefits be extended to other parts of the university?

We believe that our findings should be applicable to a range of schools and can give reassurance that lecture recordings and online resources are equally valuable to international and domestic students. However, it also raises the caveat that many students do not see lecture recordings as a critical resource – which may impact how strongly schools push to expand their coverage.

Financial statement (please delete as appropriate):

This project has utilised the funding awarded to it by the PTAS adjudication committee and the Principal Investigator or School Administrator appropriate can provide financial statements showing the funding usage as and when required by the UoE Development Trusts who may require it for auditing purposes.

Please send an electronic PDF copy of this report to:

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