



PTAS Project Report (for SMALL PROJECT GRANTS)

Project Title:

How can supplementary audio recordings (podcasts) enhance the online distance learning experience?

Principal Investigator : Emily O'Reilly

School / Department : Deanery of Biomedical Science, School of Medicine, College of Medicine & Veterinary Medicine

Team members : Andrew Strankman (GHID MSc student, now graduated)

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Brief Report (maximum 500 words)

To expand the range of supplementary learning resources for students on two established online MSc programmes: Global Health & Infectious Disease (GHID) and International Animal Health (IAH), this project sought to produce podcasts, ranging from summary to guest podcast, make them available to students on a number of courses on the GHID and IAH programmes and ascertain the student's perceptions of the podcasts with a view of understanding what the students preferred in terms of format and whether they were additive to their learning experience. Engaging students in an online learning environment is an established pedagogical challenge that presents even further challenges when students experience poor/intermittent internet connectivity, unreliable electricity and/or study in resource poor or remote settings; together with technical issues related to hardware, these create barriers to the use of streaming based methods that enable engagement. Podcasts, downloadable for use off-line could be utilised to ensure an engaging yet equitable learning environment for a geographically and resource diverse cohort.

Following the roll out of the podcasts over the period of 2-3 years, Andrew Strankman, a final year student on the GHID MSc (online) undertook research, under the supervision of Dr Emily O'Reilly, to understand the perceptions of the students to supplementary podcasts. During the academic session 2020-2021, Andrew developed a survey that sought to compare the responses of students residing in low income (LIC), low-middle income (LMIC) and high income countries (HIC). He sought to explore whether previous experience with podcasts, the amount of previous online education and the perceptions of the podcasts on the courses were affected by the income level of the country of residence. The study revealed that the perception of the podcasts was higher in students from LIC and LMIC and that nearly all the students found them to be engaging and stimulating. Despite the being able to download and listen to offline, most students streamed the podcasts.

The results of the research were the basis of Andrew's MSc dissertation, for which he was awarded a distinction. Further dissemination followed in the September, when Emily presented the work at the Enhancing Student Learning Through Innovative Scholarship (ESLTIS) Conference 2021 as a poster (Figure 1), gaining significant interest and forming the basis of stimulating discussions with colleagues from other institutions. The project has also stimulated other outputs including a featured resources article: [Listen to this! Using podcasts for online learning](#) in The Campus Time Higher Education.

Whilst the PTAS projects is now complete, the work continues. Podcasts continue to contribute to the supplementary resources available to students on courses of the GHID and IAH programmes and continue to stimulate interest and positive feedback from students who enjoy their format and content. A manuscript is under construction for peer reviewed publication to disseminate the results more widely and Andrew is in the process of completing his scholarship by completing a podcasting course at a HE establishment in the USA (where he is based, this was delayed unfortunately due to COVID-19). Working in science education in the USA, this was an especially apt project to complete Andrew's GHID MSc and has galvanised Emily's research and work in podcasting. Moving forward Emily and Andrew will now work as collaborators to publish the work to date and also explore other areas of developing and utilising podcasts across online educational contexts.

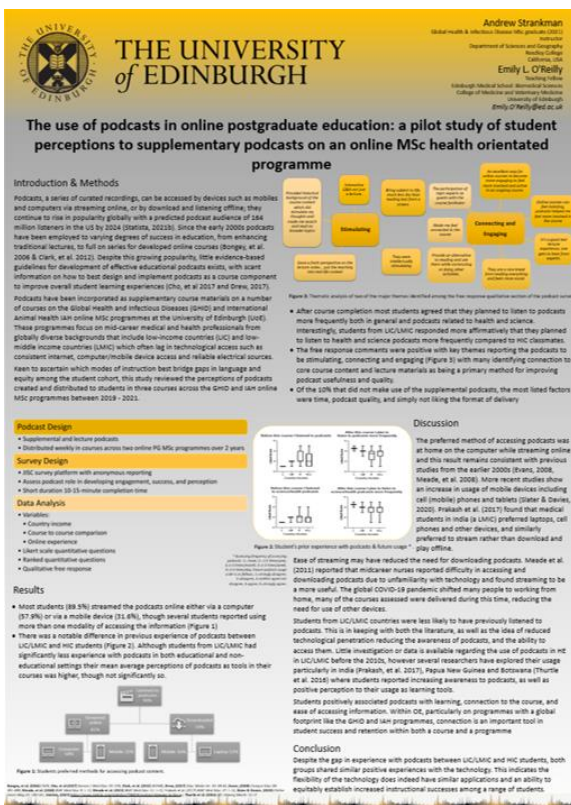


Figure 1: Poster presentation for Enhancing Student Learning Through Innovative Scholarship conference 2021 (original file available).



Poster abstract | ESLTIS 2021

The use of podcasts in online postgraduate education: a pilot study of student perceptions to supplementary podcasts on an online MSc health orientated programme

Supplementary podcasts have been promoted as a pedagogical tool on the Global Health and Infectious Diseases (GHID) and International Animal Health IAH online MSc programmes at the University of Edinburgh (UoE). Given the global nature of these programmes, course organisers were keen to ascertain which modes of instruction best bridge gaps in language and equity among students from globally diverse backgrounds that include low-income countries (LIC) and low-middle income countries (LMIC) which often lag in technological access such as consistent internet, devices and electrical sources in some areas. Keen to ascertain which modes of instruction best bridge gaps in language and equity among a student cohort focused on mid-career medical and health professionals, this study reviewed the perceptions of podcasts created and distributed to students in three courses across the GHID and IAH online MSc portfolio.

Who can be contacted for further details?

Emily.O'Reilly@ed.ac.uk and I'd be happy to pass on Andrew's details as well if he would like.
