



The Implementation of Podcast-based Assignments Can Enhance Students Scientific Communication Skills

What is this Research About?

Science students need to learn science communication skills, including how to translate scientific evidence into information that the general public can use and understand. Podcasting assignments, where students create a podcast to communicate to a general audience about a concept in science, can be an effective way to improve students' science communication skills. In this research, the researcher studied student perceptions of a podcasting assignment within a 400-level Neuropharmacology elective course.

What did the Researchers Do?

To investigate the effectiveness of podcasts to enhance the learning and science communication skills of students, the researcher created a podcast-based assignment that focused on allowing students to apply what they have learned within the course to a new topic of their choice. Students worked in small groups to develop a podcast about a drug that they would not study in class. The assignment was scaffolded into several smaller steps (e.g., podcast proposal, resource list, annotated bibliography, written draft, completed podcast) that students completed over the semester. The researcher used course evaluations from five cohorts of students to examine their impressions of the podcast assignment.

What did the Researchers Find?

Of the sixty-five students who were enrolled in this course over five years, fifty-two completed the end-of-term evaluations. Eighteen students indicated that the podcast project was the most beneficial part of the entire course. Themes identified in students' comments indicated that students felt that the project assisted with deeper learning, improved their science literacy skills, relieved the stress of learning only through high stakes exams, and built their technical skills using new media.

SoTL

Snapshot

A synopsis of a scholarship of teaching and learning journal article

→ How to Implement this Research in Your Classroom

Implementing this podcast creation assignment or other new media-based assignment may seem challenging, but a podcast creation assignment can help students further understand the course content, and develop their teamwork, communication, and digital skills.

Tips for Successful Implementation:

- Develop the assignment with scaffolding that breaks it up into steps with deadlines spread over the semester
- Provide resources to help students find peer-reviewed references to base their project on
- Provide the option for video podcasts for courses that include visual communication skills as a learning outcome
- Depending on the course level, consider allowing short podcasts of 7 – 15 minutes
- Provide students with an authentic audience for their completed podcast to increase student motivation.

→ Citation

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