KEYNOTE ADDRESS

NAVIGATING VIDEO-BASED LEARNING IN SCIENCE – HOW DO WE CLOSE THE GAP BETWEEN ONLINE AND PHYSICAL CLASSROOMS?

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ABSTRACT

Online learning increases the physical distance between instructors and students and depending on the mode of delivery it can be challenging to close this gap. In the face of a global pandemic institutions are rapidly increasing their portfolio of online and blended courses, which increases the potential risk of student attrition across the sector. To ameliorate this potential for student isolation, instructors need to communicate to students in a variety of ways, blending original online resources with synchronous interactive learning activities. In 2020, 55 videos designed for lectures, tutorials, and laboratory sessions were created for 400 undergraduate microbiology students at The University of Queensland. The videos collectively received over 35,000 views, and through learning analytics it was observed that videos featuring instructor presence on screen, frequent scene transitions, and dynamic pacing increased the consistency of student engagement (>80% average audience retention). This session will outline the design principles underlying a framework for developing video-based learning resources in science to maximise their utility as part of blended and online courses, as well as the academic digital upskilling required in the current Higher Education landscape.