Transforming a compulsory communication and research skills module through adaptive learning technology and interactive case scenarios

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Communication and Research Skills (CARS) is a mandatory online learning module that is completed by around 5,000 undergraduate students annually at The University of Western Australia. It is an early point of contact for students in their first year of study and is seen as a stepping stone to their future academic success. However, it has been an ongoing challenge to appeal to a broad range of student ability, whilst maintaining engagement and practicality. Unfortunately, students may not appreciate how CARS relates to their learning experience in their chosen course of study. The purpose of this project is to redesign CARS to enhance student learning and decision making through narrative based mini-scenarios.

The project team used Cathy Moore's 'action mapping' process to develop narrative scenarios and storyboards. The module stories and characters were designed to be compelling, where students are required to make real world decisions based on factors including; consequences, time pressure, emotional pressure, common assignment mistakes, and debate. The prototypes were developed in open-source storytelling software Twine, and then later transferred to Articulate Storyline for publishing in the Blackboard Learning Management System. Adaptive learning features of Articulate Storyline that were utilised include; branching decision points, conditional triggers, and customised feedback. Graphical and interactive elements have been incorporated to add variety and aid in the storytelling process.

Even though this project is in a pre-implementation phase, early user testing indicates the new approach to CARS is more relatable, engaging and intuitive. This project is significant because it demonstrates how independent online learning modules may be developed beyond simple 'tell and test' methods, to include real world scenarios and decision making in core academic communication and research skills. This presentation will outline the steps involved in redesigning CARS, and the challenges encountered in the process.