2016 WAND SMALL GRANTS SCHEME FINAL REPORT

Project Leader: Mr Lionel Skinner
Team: Associate Professor Steve McKenna

Project Title: The impact of an online game on learning and teaching pedagogy on student engagement and learning outcomes

Budget: \$6000

Spent: \$2938.38

Balance: \$3061.62

Main outcomes and achievements of the project

The project gathered feedback from students on their perception of the introduction of an online game that was introduced in Fundamentals of Management, a first year unit that forms part of the Bachelor of Commerce degree at Curtin University. The feedback involved analysis of Curtin eValuate data, aggregated (Grade Centre) data and focus group interviews. Researchers analysed qualitative and quantitative data from students before introducing the game in Semester 1 2013, and after introducing the game in Semester 1 2015.

Executive Summary

The introduction of the online game has been associated with a positive growth in student engagement and motivation. Notably, the average grade dropped after the game was introduced. Before introducing the game in Semester 1 2013, the student satisfaction rate of the unit was 75 percent. After the game was introduced 90 percent of the students were satisfied with the unit. The number of students enrolled in the unit also increased. Before the game was introduced 1109 students were enrolled. The total enrollment numbers increased by 16 percent to 1284 in Semester 1 2015. We found that the students' final grades have an inverse relationship with student engagement and motivation. After introducing the game the average grade had dropped by 5% from an average of 55% to 50%.

Recommendations for future investigation

More investigation is needed to investigate the inverse relationship between student engagement, motivation and grades. It is unclear if the fall in average grades is a result of the introduction of the online game or other factors related to the flipped classroom activities, digital media learning materials or assessment considerations.