Technology Enhanced Learning Spaces

- Technology enhanced learning environments can improve the student experience when implemented into the curriculum in meaningful ways (Yang et al., 2013; Walker et al., 2011).
- Technology active interactive participation in learning environments is recognised as vital in improving the learning process, and designing learning for the future (Pitt et al., 2012).

Research Objectives

- This project explores how the use of a technology enhanced learning space, The Agency, has affected the learner experience.
- This project contrasts two units with varying adaptations in technology use - Unit A, with comprehensive pedagogical adaptation, and Unit B, where the technology enhanced learning environment is not integral to the learning design.

The Agency

- The Agency is a technology enhanced learning space located at Curtin University’s Bentley campus.
- The Agency provides experiential learning in an environment that has the look and feel of a contemporary communications agency.
- The Agency enables active live case learning where Radian6 and the media wall are used to present learners with information on a live case. This allows for learners to engage in active, critical analysis of the situation, responding to real-time information.

Methodology

- A case study approach was adopted for this study, with a questionnaire (20 items) to explore how the physical space affects student learning.
- Undergraduate learners (n=174) from one of two units (Unit A [n=97] & Unit B [n=77]) were surveyed; as each unit has adapted their pedagogical approach to The Agency to varying degrees.

Findings

- Overall, there was strong agreement that the technology learning environment helped to enrich the learning experience ($M = 5.53$, $SD = 1.04$), and development of professional skills that could be transferred to the real world ($M = 5.47$, $SD = 1.15$).

- Comparing The Agency’s effect on the learner experience for Unit A and Unit B students, Unit A, where there was comprehensive pedagogical adaptation had much stronger learner outcomes ($M = 5.28$, $SD = .91$) relative to Unit B ($M = 4.97$, $SD = .95$) at the 95% confidence level; t($172$) = -2.19, $p = .030$.

Research Contributions

- The Agency is a technology enhanced learning space that does have a positive impact on the learner experience, however, pedagogical change attenuates this.
- Technology is an enabler for an improved learning experience, with evidence that adaptation of teaching practices, together with the learning space, have a more positive influence on student engagement, and their learning experience (Yang et al., 2013; Walker et al., 2011).