

# More than the sum of its parts: Evaluating a model of teaching and learning

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How does one re-create the intimate atmosphere of a small tutorial with all its inherent promise of one to one interaction, student engagement and improved learning outcomes in a large class first year course? Lecturers from a research intensive university faced with increasing class sizes, falling class attendance, disengaged students and a general feeling of frustration with the traditional lecture model are using a teaching model based around active learning principles (Beichner, 2007; Deslauriers, Schelew, & Wieman, 2011; Meltzer & Manivannan, 2002; Prince, 2004). Active learning strategies utilised include student prereading and an online quiz, problem solving opportunities within the lecture, the opportunity for students to engage with both their peers and the lecturer and built in rewards for participation in these learning activities (Caldwell, 2007; Crouch & Mazur, 2001; Meltzer & Thornton, 2012). Such a departure from traditional methods of teaching provides an ideal and timely opportunity to develop an evaluation framework that can provide the necessary data to confirm increased engagement and improved learning outcomes for the students involved. This showcase explores the evaluation methods utilised to consider student perceptions of the teaching methods being used in two first year courses. Quantitative and qualitative data collected over a two year time frame included pre and post surveys, focus group responses, class observation and secondary data analysis (Creswell & Plano Clark, 2007; Greene, 2007). Focus group data indicated higher levels of student engagement (Kuh, 2008) with the process, and while survey data was not quite as conclusive and varied from cohort to cohort; it provided an interesting insight into student understanding of the process. The development of a general framework for evaluating active learning teaching strategies offers the potential to understand how students are responding to the reimagining of their learning spaces; the move away from the 'passive' lecture theatre environment to the 'activity' driven problem solving space of the evolving classroom.