In 2013 the Faculty of Health Sciences secured a University of Adelaide e-learning grant to investigate the effective design, implementation and evaluation of flipped learning across first year courses. A core aspect of this grant was to help teachers understand how this pedagogical concept can be translated into practice especially in large foundation classes.

The Flipped Classroom

The ‘flipped classroom’ is a pedagogical model where traditional lecture and homework elements are reversed. Core features of flipped learning approaches include interactive content in advance of the face to face and development of higher-order learning during class-time. (Anderson et al., 2001; Hamdan et al, 2013; Lage and Platt 2000)

Flipping Health Sciences

Flipped classrooms in first year human biology and public health were targeted in oral health, nursing and health sciences programs. Articulate Storyline© and narrated PowerPoint© were used to create pre f2f Interactive Learning Modules (ILM). Checkpoints were embedded at strategic points in the ILMs using MyUni and Survey Monkey©. These provided feedback to teachers about students’ levels of understanding.

Evaluation

Evaluation data is being analysed. The most significant issue that is emerging is the engagement of large student cohorts. To date student completion rates of pre class ILMs for oral health students (n=32) 98%; Public Health students (epidemiology n=62) 97%; Nursing students (n=166) 80%; Public Health students (n=370) 54%.

Initial qualitative feedback from students include:

“ILMs are a great tool as they can be listened to many times”
“ILMs are a good way to introduce topics”
“Able to learn in lectures and at home using the ILMs”
“Online sessions are really helpful ”

Bachelor of Oral Health 2013 SELTS

Post course surveys indicate varying degrees of student satisfaction rates. The traditional lecture format still seems to be preferred by some 40% of the student cohort.

Key Elements for successful flipped learning

- Student induction
- Workload shift
- Selection of key curriculum components suitable for flipping
- Blueprinting against conceptual frameworks to enhance metacognition
- Interactive pre-class activities: formative feedback mechanisms
- Gathering data on student levels of understanding to inform the face-to-face sessions
- Value adding to the face-to-face: actively engages students in higher order thinking skills of application and evaluation

References: