

Instructor creativity in producing learning activities for a diverse cohort of first year anatomy and physiology students.

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We co-teach first year anatomy and physiology to 320 allied health students studying 4 different programs (Occupational Therapy, Physiotherapy, Speech Pathology, and Sport and Exercise Science). The cohort is comprised of just over half first-in-family students, with diverse academic backgrounds, as evidenced by a broad range of university entrance scores (Australian Tertiary Admission Rank (ATAR) 99.95-35, with just under half of ATAR 87 or lower). Historically the subject has been characterised by student disengagement, and a high failure rate. As an initial strategy to address this issue, in 2015 we introduced activity-intensive workshops as part of flipped-classroom learning experiences. The activities were designed to increase visualization of concepts. The instructor needs both a solid understanding of the concept and a high degree creativity when designing these activities. For example, orange safety mesh was used to model the cell membrane for a role play on cellular transport processes and simple garden irrigation equipment used to simulate a nephron. Students also used a high degree of creativity in producing posters for case studies, which were utilised as another strategy to enhance student learning and engagement. Students were surveyed regarding their experiences in both 2015 and 2016. They were ambivalent about how useful the different activities were in helping understanding of concepts in 2015. In 2016 we increased the instruction around how the exercises should be utilised and this resulted in the students gaining much more satisfaction from the activities.