

A novel approach to problem-based learning within an applied paramedicine subject

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Many allied health, medical and nursing higher education programs use problem-based learning (PBL) to assist future practitioners 'bridge the gap' between theory and practice. Commencing in 2015, a cross-disciplinary team of academic and educational design staff sought to progressively transform an applied pharmacology subject within a large, multi-campus undergraduate paramedicine degree. The subject redesign sought to more contemporaneously address course learning outcomes and industry expectations that future paramedics would not merely acquire theoretical knowledge and technical skills within their paramedicine degree, but would possess additional non-technical skills in the areas of problem solving, decision making, reflective practice and a commitment to life-long learning. These requirements are evident within accreditation frameworks for undergraduate paramedicine programs and reflect modern expectations made of university graduates in the workplace.

The subject redesign team formed a view that PBL techniques may help foster higher order non-technical skills among paramedicine students within this subject. PBL has been described as 'a combination of cognitive and social constructivist theories, as developed by Piaget and Vygotsky, respectively' who – among other seminal insights – held that knowledge is not passively acquired but is actively discovered and constructed within dynamic social contexts. For these reasons, PBL approaches were integrated into the practical components of this applied pharmacology subject in order to bridge the theory-practice gap and better prepare students for safe clinical practice in the field of paramedic pharmacology intervention.

This presentation describes the redesign process which has occurred over a four-year period, including the most recent lessons learned in the past 12 months. A five-step model for implementing PBL within applied paramedicine subjects is presented for further consideration.