



Bridge2Practice: an interactive skills training e-tool which improves learning outcomes in university health students

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Given the challenges with COVID-19 in the past two and a half years, clinical programs have struggled to find placements where students can get hands on experience assessing and working with real patients. Placements have switched to tele-practice or simulations each of which has a range of limitations. A key learning objective in healthcare programs is that students will be able to develop procedural skills, so reduced placement availability impacts students' opportunity to practice these skills. Learning procedural skills also poses a problem for time-poor educators who must provide feedback to students and opportunities for students to practice in the classroom environment. An online learning tool aims to bridge these learning gaps and address the abovementioned educational challenges.

Bridge2Practice (B2P), created by the School of Health Sciences, The University of Sydney, enables health students to practice identification of a range of specific features of clinical interventions and receive immediate feedback. B2P uses patient recordings for the learner to identify features of clinical interactions and procedures and subsequently receive immediate feedback and comparison of their assessment to that of their peers and experts. As such, it utilizes consensus learning and harnesses aspects of successful coaching such as reflection and explicit practice (Cushion et al., 2012; Cushion et al., 2003; Madill et al., 2020), to support the learning and teaching of motor and procedural skills to patients in clinical settings.

B2P is freely available 24/7 and is utilised by over 7000 users from more than 14 institutions around the world for research and teaching purposes. It is currently used to support skill development in physiotherapy, sports science and speech pathology students and is integrated with online only and blended-learning educational programs. B2P incorporates features of Universal Design for Learning (UDL) (Dinmore, 2014), an approach to learning that involves embedding engaging and authentic learning opportunities into teaching and assessment using multiple modes of engagement. B2P also optimises relevance, value and authenticity, fostering collaboration and community and increasing mastery-orientated feedback.

In a case example of clinical skills of entry-level speech pathology students, we will show B2P's flexibility in supporting learning objectives and skill development based on a UDL perspective of learning. Students watch and rate a range of clinical videos in B2P to identify features relevant for clinical practice and receive immediate feedback of their ratings compared to experts' and other students' ratings of the same sample. This immediate feedback enables students to see the difference between novice and expert ratings, and observe the formation of a consensus answer by the student group. The benefits of practice via B2P is evidenced by a positive correlation between students who engaged with B2P and improved assessment results. Furthermore, B2P was of benefit to staff in saving them thousands of hours of marking and feedback.

In the future, B2P will continue to be implemented to promote student engagement in skill development across a range of allied health settings with the capacity for application in other disciplines where interactive skill-based practice is required.

Keywords: etool, real-time feedback, Universal Design for Learning, clinical skills, practice

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