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The Future is Connection:

Collaboration, Creativity and Compassion in a Digital Society

Designing simulation-based learning for international healthcare students in preparation of work-integrated learning

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International healthcare students experience additional stressors during mandated work-integrated learning (WIL), compared to domestic students. A key identified obstacle for international healthcare students can be the development of work-based relationships with healthcare staff and patients, due to language and culture differences (Hari et al., 2021; Oikarainen et al., 2018; Yu et al., 2023). Strategies to address these difficulties have included communication skills training (Brewer et al., 2024; Chan et al., 2016; Merry et al., 2021), accent-related communication (Chan et al., 2016) and cultural competence (Merry et al., 2021). While communication is critical, WIL incorporates many different physical, social and emotional learning components. A teaching method that encompasses contemporary learning theories, whilst capturing clinical and interpersonal skill development, is simulation-based learning (SBL) (Judd et al., 2023; Ludvig et al., 2024). SBL is widely used in healthcare training, however there are few comprehensive reviews of SBL approaches specifically for international healthcare students. This Pecha Kutcha presentation will present the process of designing a SBL intervention for nursing students, through a design-based research (DBR) framework.

Keywords: international healthcare students, simulation-based learning, work integrated learning preparation

Aim

To design an evidence-based SBL intervention that improves international healthcare students' WIL experience and outcomes using a design-based learning framework.

Method

McKenney and Reeves (2021) argue that DBR can serve medical education problems. DBR is a method to source useable knowledge to develop solutions to practical and complex education problems (McKenney & Reeves, 2019). There are four phases to the DBR framework that underpin this PhD project. The PhD project has completed phase one of the DBR framework, which involved an analysis of the problem, then progressed to phase two, the design of a prototype teaching intervention (McKenney & Reeves, 2019). The process of phase one included several literature reviews to comprehend experiences and WIL outcomes for international healthcare students and current educational methods in preparation for WIL. The outcome of the second literature review identified SBL as a viable teaching method to prepare international healthcare students for WIL.

Therefore, a scoping review was undertaken to explore the depth and breadth of research into SBL for international healthcare students to identify best practice and knowledge gaps in preparedness for WIL. Through analysis of the scoping review and expert consultation, the project progressed to phase two of the DBR framework, the development of an innovative SBL intervention with a strong theoretical underpinning for nursing students (McKenney & Reeves, 2019). The SBL learning intervention proposes role-play in combination with the use of virtual/mixed reality to enhance preparation for WIL. The prototype intervention will use a room-based immersive reality (XR) platform called Blended Learning Interactive Simulation Suite to create realistic healthcare environments, in which international nursing students complete role-play interactions to develop clinical and communication skills required for WIL.

Outcomes and implications for practice

With 9% of tertiary international healthcare students in Australia undertaking a healthcare degree with

mandatory WIL, there is a need to improve preparedness and improve the experience of these students within the Australian healthcare environment (Norton, 2023). This presentation aims to demonstrate the robust research required for phase one of the DBR framework, to be able to understand an educational problem in depth and evaluate current teaching practices, then design innovative teaching methods in combination with best current practice.

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