Client-Patient Safety
Supporting Competency Development through Virtual & Traditional Simulation

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Purpose

This R&D project is a part of a National drive toward the development of renewed strategies and models that strengthen co-creation between higher education and working-life. Through the development of cross-sectional networks *best practices* are shared, helping to ensure that competency development in higher education matches the current and future challenges of the working world. It is hoped, the *new* structures and models developed through this project will support multicultural higher education students as they prepare for their future profession in nursing.

This project, used virtual simulation in conjunction with traditional simulation to i) identify factors related to the competence development of first year nursing students who study alongside others from varying nationalities, in a foreign language, ii) evaluate congruence between first year nursing students' self-assessments during virtual simulation and their ability to prioritize care and utilize clinical reasoning during traditional simulation exercises.

This research aims to increase understanding as to the needs of diverse groups of nursing students, in order to facilitate the development of effective educational practices, combining both virtual and traditional simulation.

Methods

Research type: Action research

Stakeholders: First-year multicultural nursing students, Arcada Patient Safety and Learning Center, Laerdal Medical.

Methodology: This was a qualitative study using an inductive approach. Students were invited to give feedback via questionnaires and focused group discussions after the first and second semester of study. (ie. December 2017 and May 2018).

Timeline: This project began August 2017 and ended June 2018. There were two phases. The first phase took place during the first semester of study when virtual simulation (vSim) and traditional simulation were introduced. The second phase began during the second semester of study after students use the vSim software in conjunction with traditional simulation exercises. Students were invited to participate in questionnaires upon the completion of their first and second semester. The feedback from students was used to guide focused group discussions at the end of the first and second semesters.

Results:

Through this investigation, it was uncovered student's strong reliance on memorization, mimicking and recall and a lack of reliance on critical thinking and problem solving during demonstration/assessment. It would be interesting to uncover if students lack the capability for higher reasoning at this stage in university or if students make these choices during assessment out of habit/ (self-preservation, contextualization)

Basis for continued research

Future studies could investigate if and to what extent the timing and type of assessment practices teachers utilize, influence the choices students make during assessment? (i.e. lack of soak time in the content, end of term exams lead to learners memorizing content to cope with the amount of information that must be delivered on demand.) It would be interesting to see if a study using diverse assessment practices across several courses for an entire academic year would allow students the opportunity to choose a different approach during demonstration and assessment. Also, do students make the same choices when in the field?

Through this project, new models/strategies are being developed that are hoped facilitate the contextualization of theory and the utilization of critical thinking and problem-solving during care activities that involve multi-cultural, multi-professional caring clusters.