

xR HEAD

eXtended Reality Health Economic Acceleration and Development



Virtual Reality Focused Assessment Tool

PROJECT FAST FACTS

PARTNERS: ICOM Productions Inc. and Bow Valley College

AWARD: \$250,000

THE PROBLEM

Nursing programs often experience issues related to skills testing in the laboratory setting. Assessments rely on a costly 1:1 student/faculty ratio and they are often subjective and susceptible to unintentional examiner biases. In addition, because assessments are often performed on fellow students who are usually healthy, students will be unlikely to encounter abnormal findings prior to their clinical placements, which may lead to students who feel less confident or competent.

THE SOLUTION

The development of a virtual reality training and evaluation platform, The Virtual Reality Focused Assessment (VRFA) tool: a health assessment training tool that can be used to solve some of the issues associated with laboratory-based skills testing.

The VRFA gives students an opportunity to practice on diverse virtual patients who are programmed with various conditions affecting different body systems. This will give students exposure to abnormal conditions prior to their clinical placements. The VRFA is also able to track the steps that students take in the assessment process and allow them to chart their findings.

Encountering these abnormal conditions prior to clinical placement will help students to develop the knowledge and skills they need to be more confident, competent, and work-ready. As health assessment courses and testing are key components of Practical Nurse, Registered Nurse and Nurse Practitioner programs, the VRFA displays significant scalability and can easily accommodate the scope of different nursing programs.

Additionally, because the VRFA can grade students, the prior subjectivity of the assessment can be mitigated. With an 11:1 student: instructor assessment ratio, multiple students can be evaluated simultaneously – saving time and resources for the institution by reducing instructor workload.

PROJECT OBJECTIVES

- Develop multiple scenarios for the platform covering a variety of conditions and systems.
- Test and validate the scenarios in real-world settings.
- Commercialization within the Alberta market and beyond.

ABOUT xR HEAD

In partnership with the Alberta Chapter of the Virtual Reality / Augmented Reality Association (VRARA), Alberta Innovates is proud to announce the eXtended Reality Health Economic Acceleration and Development (xR HEAD) program. This program will be a first-of-its-kind opportunity for stakeholders in Alberta's virtual, mixed, and augmented-reality (collectively 'xR') health innovation ecosystem to come together in a coordinated way to jointly develop xR innovations that can enhance patient care or support the training of health professionals. These opportunities will be co-identified and co-developed by health innovation stakeholders and will align to Alberta Innovates' four research and innovation priorities, the Alberta Research and Innovation Framework (ARIF), and will create economic and health system economic value.

Learn how

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