Higher Education Quality Council of Ontario
Conseil ontarien de la qualité de l'enseignement supérieur
An Agency of the Government of Ontario

Stakeholder Summary

Students Prefer Using Innovative Tool for Learning Hand Anatomy

Students in Humber College's massage therapy program found that they preferred using a new teaching tool, the Anatomy Glove Learning System (AGLS), for learning the complexities of hand anatomy. The tool was developed by two professors at the University of Toronto to provide students with a better learning experience by engaging them in a 3D, tactile experience. A new report by the Higher Education Quality Council of Ontario (HEQCO) finds that while the AGLS had the same effect on knowledge and self-confidence as the traditional teaching method, students strongly preferred using the new tool.

Project Description

The AGLS is a glove imprinted with anatomically correct bones that allows students to draw anatomical details like tendons and ligaments while watching instructional video clips. The study included 88% of all first-year massage therapy students at Humber. Participants were divided into two groups, one using the AGLS and the other using more traditional 2D instruction. Students were given an evaluation questionnaire, a measure of perceived self-confidence and anatomy knowledge before and after their term.

Findings

Participants who used the AGLS found it to be a positive learning experience and recommended it for use by future students. In the questionnaire, 66% of students felt the glove improved their understanding of hand anatomy, with one saying "It gave my learning a more visual 3D experience and a better understanding of where certain muscles are located." The majority of students said they intended to use the glove and/or the videos in the future for exam preparation, which could result in better long-term engagement and learning.

The authors note that technological tools like the AGLS can help compensate for the fact that a growing number of anatomy-focused programs have reduced access to cadaver labs.

The Effectiveness of Anatomy Glove Learning System in the Training of Massage Therapy Students was prepared by Kristina Lisk, Pat McKee, Amanda Baskwill and Anne Agur from Humber Institute for Technology and Advanced Learning and the University of Toronto.