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

Stakeholder Summary

Force-Sensing Table a Useful Tool for Teaching Chiropractic Skills

A tool for teaching chiropractic techniques, Force-Sensing Table Technology (FSTT) measures the nature of the force being applied to the spine and provides real-time feedback to the student and instructor. A new study by the Higher Education Quality Council of Ontario (HEQCO) finds that students using FSTT were able to improve their performance of chiropractic adjustment techniques in just one two-hour session. The study also shows that students who did not perform well using the technology were motivated to increase their practice of the procedures and improved performance comparable to their peers when re-evaluated.

Project Description

Enhanced Learning of Manipulation Techniques using Force-Sensing Table Technology (FSTT) examined classes of 200 students at the Canadian Memorial Chiropractic College. As part of the school's recently opened simulation laboratory, four custom FSTT stations allow students to rehearse treatment skills, first on a foam mannequin and then on volunteer subjects. Training in the simulation laboratory takes place in the second and third years of instruction. The study uses both quantitative measures of performance and qualitative surveys of confidence and competence. A control group of fourth-year students had not been exposed to the new lab technology.

Findings

While retention is typically a challenge in teaching manual skills, students using FSTT maintained their progress across the five to seven-month span between simulation sessions. Students were also able to respond to changing criteria in the simulation by modulating the amount of force.

As might be expected, student confidence and competence increased between their initial and final lab experiences, although the supervisors rated the students significantly lower than students rated themselves. Students who used FSTT rated themselves slightly lower than students who did not, possibly due to a greater awareness of shortcomings provided by the detailed feedback.

Enhanced Learning of Manipulation Techniques using Force-Sensing Table Technology (FSTT) was prepared by John Triano, Dominic Giuliano, Marion McGregor, Loretta Howrard, Canadian Memorial Chiropractic College.