Institute of Theoretical Computer Science and Communications

ITCSC Seminar

An Evidence-Based Learning Approach To Development And Evaluation Of An Interprofessional Core Competency Framework for Healthcare Students and Practitioners

By Prof. Jayshiro Tashiro, PhD, BSN, RN

Health Education Technology Research Unit University of Ontario Institute of Technology

> August 12, 2009 (Wednesday) 2:30pm - 3:30pm

Rm. 121, Ho Sin Hang Engineering Building, CUHK

Abstract:

We will describe the research methodology used for developing an Interprofessional Core Competency Framework for Canada and also describe how to measure complex interprofessional clinical competencies using a computer-based adaptive learning system nested within an automated research platform. The focus of the presentation will be on studies conducted at the University of Ontario Institute of Technology (UOIT). Our research explores use of computer-based clinical simulations to improve interprofessional competencies of undergraduate Health Sciences students and practitioners. The Health Education Technology Research Unit at UOIT has developed an evidence-based learning framework for improving the education and interprofessional competency development of healthcare students and practitioners. The Interprofessional Core Competencies Framework and the computer-based adaptive learning system discussed in this presentation are examples of how we empirically derive educational methods and instructional materials.

Please see speaker's biography on next page

*** ALL ARE WELCOME ***

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In Favour of Posting

Biography of Prof. Jayshiro Tashiro

Dr. Tashiro is currently a Professor in the Faculty of Health Sciences at the University of Ontario Institute of Technology (UOIT). His research focuses on telehealth and disease management as well as on the relationships between evidence-based learning and evidence-based practice in healthcare. At UOIT, he teaches In the Health Information Management Program and is currently building and evaluating courses that promote interprofessional collaborative patient-centred care. Tashiro also helped establish and now is part of the Management Team for the Health Education Technology Research Unit at UOIT.

Tashiro received the BA from Kenyon College (Gambier, OH, USA) in 1973, the Ph.D. from Syracuse University (Syracuse, NY, USA) in 1980, and the BSN from Northern Arizona University in 1999 (Flagstaff, AZ, USA; now a licensed RN in Arizona). His doctoral work focused on Physiological Ecology with an emphasis in biostatistics. Since 1987, his work has explored health informatics, telehealth system development, and methods for assessing complex clinical competencies. In October 1998, Tashiro and Dr. Ellen Sullins formed Wolfsong Informatics®, a research and development group dedicated to development and evaluation of educational software. Tashiro has been continuously funded for research and program development since 1989, with total funding from 1990-2006 of \$15 million USD.

Since 2006, Dr. Tashiro has worked with an international research and development team to study how and why to build new models of health information management and more sophisticated telehealth and wellness education systems that might better serve aging populations. This team has implemented a variety of research projects, including: (1) clinical workflow data collection and management applications, (2) computer-based wellness education systems to improve health of elders, (3) adaptive learning systems for measuring conceptual and performance competencies in clinical practice, and (4) a telehealth system that combines the monitoring capacities of current systems with new types of sensor arrays that are built around smart-house technologies. All of these research projects have been funded during the past three years with extramural grants amounting to over \$1.5 million USD.