Computer Supported Collaborative Learning requiring Immersive Presence (CSCLIP): Minitrack Introduction

CoChairs:
Nicholas C. Romano, Jr., Joyce Lucca, Ramesh Sharda
Department of Management Science and Information Systems
College of Business
Oklahoma State University
Nicholas-Romano@MSTM.OKSTATE.EDU
ljoyce@catt.okstate.edu
sharda@okstate.edu

This minitrack addresses Computer Supported Collaborative Learning Requiring Immersive Presence (CSCLIP). Immersive Presence (IP) may be characterized in at least two ways. First, it allows same-time different-place (STDP) interaction among students, instructors, equipment and Information Technology (IT). Second, it implies a “sense of presence” that is typical in lab or training environments. The right mix of learning theory, group dynamics, IT, and high bandwidth will enable a new level of interactivity to support CSCLIP. This research stream also focuses on the underlying theoretical constructs that will be important in further CSCLIP studies.

Joyce Lucca, Nicholas C. Romano, Jr., Ramesh Sharda and Mark Weiser in their paper An Assessment of Elearning Technologies to Support Telecommunications Laboratory Learning Objectives examine the next generation of distance learning to bring remote students into the laboratory. This paper describes an on-going implementation of an environment that allows remote interaction with equipment and other participants that previously required co-location. Technology is used to extend a telecommunications laboratory (lab) to enable acquisition of cognitive, affective and psychomotor skills. New hardware and software are being applied to develop a virtual lab experience through which remote students can attain learning objectives as well as students that use a traditional face-to-face (F2F) lab environment. The paper focuses on assessment of such a system.

William Hafner and Timothy J. Ellis in their paper entitled Project-Based, Asynchronous Collaborative Learning describe numerous challenges inherent in promoting learning, especially at the higher cognitive levels in an asynchronous learning network. Project-based, team assignments have been successfully used in traditional classroom settings to foster a greater depth of learning. This type of assignment, however, is very difficult to plan, develop, and execute in an asynchronous learning environment. The goal of this paper is to present a systems approach to project-based team assignments that has been successfully implemented in a graduate school of computer and information sciences.

Richard Potter and Pierre Balthazard in their paper An Example of CSCLIP Delivery and Research Technologies with Some Preliminary Findings from the Field present research based on the authors’ development and use of two information technologies that represent CSCLIP technologies presently used in university settings. The main strengths of these technologies are their applications to both research and practitioner use, focusing on group and individual variables, process variables, and process outcomes. The tools specifically deliver rich CSCLIP experiential learning, particularly affective behavioral learning dealing with group communication and dynamics, motivation and attitude, communication skills, and information exchange. The technologies also capture and convey to researchers and users how these variables impact group process variables and both achievement and nonachievement outcomes. They describe these tools and their theoretical bases and then present an overview of a study that compares their performance with their noncomputer supported counterpart.