Introduction to Advances in Teaching and Learning Technologies Minitrack

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The Advances in Teaching and Learning Technologies Minitrack has a history at HICSS that spans more than seventeen years. Various incarnations of this minitrack have served as an outlet for researchers who investigate the collaborative aspects of teaching, learning, and technologies that help to facilitate the teaching or learning process. The minitrack originally focused on collaborative software and technologies that operated in LAN-based environments. In more recent years, there has been a shift toward exploring social computing applications as well as various mobile computing devices across a variety of contexts.

Consistent with past years, we received a large number of submissions to the Advances in Teaching and Learning Technologies Minitrack. Twenty five papers exploring a wide variety of themes and applications of collaborative learning-based technologies were submitted by researchers from around the globe. It is encouraging to see the sustained efforts of so many scholars actively exploring this topic. This year, we are pleased to feature eight papers that are organized into two discussion sessions.

The first session contains four papers that explore the impact of various technologies intended to help increase learning at the early childhood level. These papers include:

- “Manipulating Virtual Objects With Your Hands: A case study on applying desktop augmented reality at the primary school” by Gustavo Salvador-Herranz, David Pérez-López, Mario Ortega, Emilio Soto, Mariano Alcañiz, and Manuel Contero,
- “Gestural Interface Technology in Early Childhood Education: A framework for fully-engaged communication” by Holly Tootell, Melinda Plumb, Colin Hadfield, and Linda Dawson, and
- “Pedagogical Architecture- Internet Artifacts for Bilingualism of the Deaf (Sign Language/Portuguese) by Cayley Guimarães, Diego Antunes, Laura García, Leticia Peres, and Sueli Fernandes, and
- “Exploring a text-to-speech feature addressing learning experience, enjoyment, learning styles and values – A basis for future studies” by Margit Kastner and Brigitte Stangl.

The second session features four papers on the broad topic of how teaching and learning technologies impact organizations and learning environments. These papers include:

- “Impact of Technology Management on Organization-Wide Integration” by Gregory Larosiliere, Roger McHaney, and Kevin Kobelsky,
- “Sharing and Reuse of Innovative Teaching Practices in Emerging Business Analytics Discipline” by Olivera Marjanovic,
- “The Impact of Time on Sense of Community in an Asynchronous Learning Network” by Timothy Ellis, and
- “Using Online Digital Tools and Video to Support International Problem-based Learning” by Cindy Hmelo-Silver, Chestra Khurana, Susanne Lajoie, Jingyan Lu, Jeffrey Wiseman, Lap-Ki Chan, and Ilian Cruz-Panesso.

As always, we would like to extend our sincere appreciation to the authors whose tireless research efforts continue to support this vibrant minitrack at HICCS as well as the many, many reviewers who selflessly dedicate their time to furthering the research of our contributors. We are looking forward to the continued growth and evolution of this exciting field of research.