Introduction to Advances in Teaching and Learning Technologies Minitrack

David H. Spencer
New Jersey Institute of Technology
dspencer@njit.edu

Eric L. Santanen
Bucknell University
eric.santanen@bucknell.edu

The Advances in Teaching and Learning Technologies Minitrack has had a long history at HICSS. This minitrack has 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 web 2.0-based social computing applications and cross-cultural settings.

Consistent with past years, we received a large number of submissions to the Advances in Teaching and Learning Technologies Minitrack – more than 30 papers exploring a wide variety of themes and applications of collaborative learning-based technologies. It is encouraging to see the sustained efforts of so many scholars actively exploring this topic. This year, we are happy to feature thirteen papers that are organized into four discussion sessions.

The first session contains three papers that demonstrate the impacts of anchored discussions and community building activities on the learning process. These papers include:

- "Re-Design and Evaluation of an Anchored Discussion System" by Evren Eryilmaz, Terry Ryan, Mary Poplin, and Justin Mary (this year's best paper nomination),
- "Anchored Asynchronous Online Discussions: Facilitating Participation and Engagement in a Blended Learning Environment" by Nimer Alrushiedat and Lorne Olfman, and
- "Understanding E-Learning System Usage Outcomes in Hybrid Courses" by A.K.M. Najmul Islam.

The second session features three papers on the theme of assessment of learning and learning outcomes. These papers include:

- "Evaluating E-Assessment for Exercises that Require Higher-Order Cognitive Skills" by Tim Majchrzak and Claus Usener,
- "Experiences with Using Assessment Based, Double-Loop Learning to Improve Engineering Student's Design Skills" by Paul Fortier, Judith Sims-Knight, and Benjamin Viall, and
- "Do Student-Instructor Co-Created eLearning Materials Lead to Better Learning Outcomes? Empirical Results from a German Large Scale Course Pilot Study" by René Wegener and Jan Marco Leimeister.

The third session contains three papers that focus on web- and tool-based technologies for enhanced learning. These papers include:

- "Play for Performance: Using Computer Word Games to Improve Test-Taking Performance" by Alan Dennis, Akshay Bhagwatwar, and Randall Minas,
- "Learning to Work in Partially Distributed Teams: The Impact of Team Interaction on Learning Outcomes" by Rosalie Ocker and S. Roxanne Hiltz, and
- "iPad in Education: A case study of iPad adoption and use in a primary school" by Sarah Henderson and Jeff Yeow.

The final session features four papers that explore experimental and theoretical approaches to online based learning systems. These papers include:

- "Integrating Blogging and Microblogging to Foster Learning and Social Interaction in Online Learning Communities" by Brian Thoms,
- "A Motivational Thermostat Framework for Enhanced E-Learning Systems" by Jaejeung Kim, Youngtae Suk, Dongwon Lee, and Howon Lee,
- "Engaging Students Through Web 2.0 Technologies: Capturing the Long Tail of Student Participation" by Nitin Aggarwal, Leslie Albert, Eric Walden, and Shruti Kumthekar, and
- "AskMe – A many-to-one communication platform for higher education" by Silvia Schacht, Achim Botzenhardt, and Alexander Maedche.

In keeping with past tradition, we would like to extend our sincere appreciation to the authors that continue to support this vibrant minitrack at HICCS with their continued research 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.