This special issue of the *International Journal of Information & Communication Technology Education (IJICTE)* focuses on synchronous and asynchronous technologies for online learning. Seven articles covering five topic areas are discussed. The reader will find broad understanding about online learning from the five topic areas, including synchronous hybrid learning, online dialogues, assessments, student persistence, and conversational technologies.

This issue starts with a comparison between two virtual learning environments (synchronous and asynchronous) and a face-to-face classroom approach. The next two articles discuss online dialogue proposing ways to influence digital group conversations and how teacher understanding is developed in online dialogues. The fourth article proposes assessment for online forums followed by two articles on student persistence to graduation. The final article evaluates four conversational technologies in detail; it is structured around the four technologies where the reader can choose to move back and forth between sections.

**SYNCHRONOUS HYBRID LEARNING: TEACHING COMPLEX COURSES**

Are e-learning systems ready for teaching complex courses? The article by Negash, Wilcox, and Emerson compares synchronous (real-time) e-learning systems with asynchronous e-learning systems and traditional face-to-face classroom teaching in a pilot empirical study. The article describes differences between synchronous and asynchronous Virtual Learning Environments (VLEs). Contrary to prior research that stated that e-learning systems are not ready for complex courses, the findings in this article indicate the promise of synchronous hybrid e-learning for complex courses. Self-efficacy and satisfaction were also examined, and no differences were found between students in the different learning environments. Directions for future research are proposed to further evaluate synchronous hybrid e-learning environments.

**ONLINE DIALOGUE**

Conducting a dialogue on the Web is a matter of linking thoughts in digital conversations, state authors Fahraeus and Doos. The authors focus on asynchronous online learning dialogues and posit that viewing electronic meetings as an inferior variant of face-to-face conversations is an oversimplification and outdated way of looking. Instead the authors see electronic meeting as an arena where one visits on her/his own volition and can choose what to show of herself/himself. The authors use sample digital conversations to show how electronic dialogues, like the face-to-face varieties, can be improved by the participants developing their dialogue competence. The study proposes ways in which course leaders and teachers can learn about digital interchange of thoughts and how course planners and leaders can influence positive outcomes of digital conversation through the design of tasks, group composition, and requirements.
Hui and Russel’s article examines the specific ways in which teacher understanding and learning were developed in online collaborative dialogues through the analysis of a cognitive concept called intersubjectivity. They define intersubjectivity (shared understanding as shared between social participants) and use constructivist-based professional development between teachers and researchers in four classrooms across Missouri to address three research questions. Their findings indicate two variable forms of intersubjectivity: temporary suspension and resistance/disagreement. The authors posit future implications for online teacher learning.

ASSESSMENTS: ASSESSING ONLINE FORUMS
Online forum discussion is the longest and most frequently used online learning tool. However, assessment of student online discussions is time consuming and often focused on few quantitative measures. The article by Shaul proposes assessment rubrics with eight features for online forums including initiative, effectiveness-depth, effectiveness-breadth, value, timeliness, participation, scholarship, and style. Instructor points where the instructor can vary the weights of the eight variables is included. A software program that evaluates the proposed rubrics is suggested as a solution to overcome the onerous task of assessing the expanded rubrics.

ONLINE STUDENT PERSISTENCE TO GRADUATION
Two studies evaluating online student persistence to graduation are presented. The first study looks at instructional interaction in asynchronous online learning and student persistence to graduation. In face-to-face classrooms, interaction is consistently identified as a factor that contributes to student achievement, satisfaction, and persistence; this article by Tello uses survey methodology to evaluate the same in online education by evaluating three relationships of persistence to: frequency of instructional interaction, method of interaction, and student attitude. The results indicate that student attitude toward instructional interaction and their perception regarding the method of interaction are positively related to persistence to graduation. Correlation between frequency of instructional instruction and persistence to graduate was also found. The article identifies additional situational and institutional barriers to student persistence in online courses.

The article by Conners and Mick presents a program level longitudinal study on graduation rate. The article undertakes a 10-year study of an undergraduate program in information systems to evaluate the impact of online course enrollment on graduation success. The authors evaluated three groups of students based on the percentage of online courses the students took compared to the overall courses taken for graduation: 10%, 20%, and 30%. The findings indicate that students taking online classes persist to graduation.

CONVERSATIONAL TECHNOLOGIES
Hsu evaluates four conversational technologies that have growing user base and are becoming recognized as viable tools for education: Instant Messaging, Blogs, Wikis, and Podcasts. The article examines the evolution of these technologies and the educational application for which they are being used. Several applications of these technologies in education are highlighted, among them: Instant Messaging can be appropriate for various applications, in particular for information communications in business setting, the results from educational studies appear to be mixed, with both positive and negative effects; Blogs can be useful for educational purposes, particularly where there is the need to encourage and stimulate critical thinking and reflection on a work, concept, or idea; Wiki features are being used in education including discussion/bulletin boards, brainstorming tools, online sketchpads, meeting planning, writing textbooks, and knowledge management; and Podcasts are favored in education because of the wide use of the devices such as iPod and because of common use that lowers the learning curve. The study describes the future of these technologies in educational and provides directions for further research.
Solomon Negash specializes in ICT for economically developing countries, e-learning, and business intelligence. He is the 2005 recipient of the distinguished eLearning award from his department and recipient of the 2007 Distinguished Graduate Teaching Award from his university. His work is published in Information & Management, Communication of the ACM, Psychology and Marketing, Communication of AIS, and at conference proceedings in the US, Canada, Spain, Ethiopia, Kenya, and Malaysia. Prof. Negash is the program coordinator for the Bachelor of Science in Information Systems (BSIS) program at Kennesaw State University. With an engineering, management, and information systems background, his over 20 years of industry experience include consulting, entrepreneurship, management, and systems analysis. He worked as a business analyst at Cambridge Technology Partners and managed his own consulting firm.