A wide range of theoretical and empirical analyses emphasize the importance of active participation [1] and collaboration [2, 3] among students in promoting the effectiveness of online learning. Collaboration models activity in the workplace [3], helps students to actively construct knowledge [4], enhances students’ understanding and appreciation of diversity [2], and may give students a sense of belonging online [5]. Perhaps most importantly, collaboration allows distant students to interact socially [6] and develop a feeling of community in online courses [7]. Yet, many online educators remain unsure of why, when, and how to introduce collaboration in their online classes. This special issue is designed to provide help with collaborative activities.

This special issue grew out of a workshop sponsored by the Sloan Consortium held in Victoria, British Columbia at Royal Roads University. Researchers and leaders in the field of online learning were invited to the workshop and organized into five teams to address five challenges. This issue was developed in response to Challenge 3:

**Challenge 3 (Collaboration):** What are the best ways to do collaboration, especially collaboration for teaching and learning? The group may wish to consider broader collaboration methods that aid collaboration across institutions or focus on pedagogical constructs.

Team members included: Reuven Aviv, Open University of Israel; Randy Garrison, University of Calgary; Linda Harasim, Simon Fraser University; Caroline Haythornthwaite, University of Illinois, Urbana-Champaign; Roxanne Hiltz, New Jersey Institute of Technology; Shari McCurdy, University of Illinois, Springfield; Peter Shea, University at Albany; Ray Schroeder, University of Illinois, Springfield; and Karen Swan, Kent State University. We collaborated for two days to develop the outline for this special issue. During that process, we decided that collaboration should be addressed at both the individual course and the institutional level, and accordingly decided to include the work of another workshop attendee, John Sener, to expand our inter-institutional focus. Jia Shen of the New York Institute of Technology also provided invaluable contributions to our assessment article both before and after the workshop.

Workshop members worked together to identify important topics at both levels, and individuals and teams agreed to draft papers on them. Drafts were posted online and reviewed by team members, going through several iterations of critique and revision. This volume is thus a true collaboration. Topics identified at the individual course level included facilitating collaboration, collaboration principles, instructor roles, online community, and assessment. Topics at the inter-institutional level were inter-institutional collaboration at both the course and institutional levels. It should be noted that team members also identified “diversity” as an important topic at both the course and inter-institutional level. Diversity is an issue that should definitely be addressed in the future.
Workshop members also agreed that their challenge was to take what was known from research and experience about collaboration in online environments and make it available in a useful form for practitioners. Thus, the papers in this volume uniformly provide both extensive reviews of research and theory on their particular foci and practical advice for online educators. Each of these papers is described below:

1. **Facilitating Collaboration in Online Learning**

   Caroline Haythornthwaite writes, “Simply put, collaboration entails working together toward a common goal.” In the first article in this issue, she draws from research and theory in a broad range of domains to explore three fundamental questions: 1) Why is collaboration important? 2) What outcomes do we expect from it? and 3) how does communication differ online, and what effects does difference have on collaboration? In answering these questions, Haythornthwaite provides a thought provoking introduction to online collaboration. For example, she suggests that a particularly important aspect of online collaboration may be that it fosters a sense of belonging among distant participants. She also explores the limits of collaboration in online environments, and develops recommendations for practice related to each question.

2. **Online Collaboration Principles**

   In the second article in this volume, Randy Garrison introduces the Community of Inquiry Model [8] as a theoretical frame for developing principles of collaboration designed to engage students in online learning. The Community of Inquiry model situates learning at the intersection of three ‘presences”—cognitive, social, and teaching—in the online environment. Garrison views teaching presence as the essential unifying element in an online course. He accordingly uses the three functions of teaching presence—design of learning experiences, facilitating discourse, and direct instruction—as unifying categories for the principles of collaboration, and within each category describes one principle related to social presence and one related to cognitive presence.

3. **A Study of Students’ Sense of Learning Community in Online Environments**

   Interestingly, Peter Shea and colleagues [9] performed a factor analysis of the teaching presence construct, and found that it seemed to cohere into two factors—design and the combination of facilitation and direct instruction. His research supports Garrison’s contention that teaching presence is the essential unifying element in an online course. It found that students’ perception of teaching presence predicted 63% of their feelings of community in online courses. In this article, he presents those findings, and explores the often unspoken epistemological, philosophical and theoretical assumptions upon which many models of online pedagogy are built, relating these to the importance of the development of a sense of community in online courses.

4. **Assessment and Collaboration in Online Learning**

   Assessment is the currency of the classroom; what is assessed is what is valued, and what is valued becomes the focus of activity. The corollary is also true; what is not assessed isn’t valued. However, in most online courses, traditional instructor-centered examination remains the primary means for assessing student performance. In this article, Karen Swan, Jia Shen and Roxanne Hiltz argue for the importance of assessing collaborative activity in online courses. The authors discuss three sorts of online collaborative activity—collaborative discussion, small group collaboration, and collaborative exams—and provide theoretical grounding and practical advice for assessing, and so encouraging, collaboration in each of
5. **Inter-Institutional Online Collaboration: Promoting Access, Diversity and Quality**

In this article, Shari McCurdy and Ray Schroeder introduce the topic of inter-institutional collaboration, pointing to the possibilities for connecting institutions, faculty and students afforded by the growth of the Internet. They argue that not only can significant economies be gained through inter-institutional partnerships that share resources, but that institutional courses can include more diverse students who engage and enrich the learning experience. The authors provide examples of three inter-institutional class collaborations undertaken at the University of Illinois, Springfield, and use these to explore the benefits and challenges of inter-institutional collaboration.

6. **Quality Matters: Inter-Institutional Quality Improvement for Online Courses**

One major challenge to inter-institutional sharing of online courses is insuring the quality of such courses. In this article, John Sener introduces the Quality Matters (QM) project which was designed to address national needs for credible quality assurance in online learning, and which is creating a replicable inter-institutional continuous improvement model to assess, assure, and improve the quality of online courses. The QM project evolved a set of assessment tools through inter-institutional collaboration, and uses inter-institutional peer review teams as an integral part of the quality assurance process. Its success to date indicates the viability of creating an inter-institutional collaborative process for quality improvement in online courses.

**REFERENCES**


