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Book Review – Collaborative Learning: Two perspectives on theory and practice

Editor: T. S. Roberts (2004). *Online collaborative learning: Theory and practice*. Hershey, PA.: Information Science Publishing. Hardcover (336 pp.). ISBN: 978-1-5914-0174-2.

Editor: E. F. Barkley, K. P. Cross, & C. H. Major (2005). *Collaborative learning techniques: A handbook for college faculty*. San Francisco: Jossey-Bass. Paperback (320 pp). ISBN: 978-0-7879-5518-2.

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As a new college instructor, I am always looking for innovative ways to motivate my students and encourage them to collaborate with their peers. I am not alone. According to a recent Horizon Report (2008) a "renewed emphasis on collaborative learning is pushing the educational community to develop new forms of interaction" (p. 5). The incorporation of Web 2.0 technologies into educational settings is also changing the way we think about teaching and learning by enabling students to access courses and materials anytime, anyplace. For example, Webware suites, such as Google.docs and even virtual worlds, like *Second Life*, can be used to support collaborative learning both in and out of the classroom. Because of these technological advances, places like the local café off-campus or the hallway areas outside the departmental offices are more than merely social gathering areas; they are also becoming educational spaces. While teaching and learning are no longer restricted to the formal settings, this does not mean that we should ignore classroom-based models. According to John Seely Brown and Richard Adler (2008), social learning areas, including virtual worlds, can "coexit with and expand traditional education" (p. 22).

Beginning with non-traditional settings, the selections in the book, *Online Collaborative Learning: Theory and Practice*, explore the social learning concept and examine different ways to incorporate this approach into the curriculum. These chapters are written by a diverse group of academics who represent countries such as Australia, Canada, Denmark, Germany, and the United States. Overseeing this collection is Tim Roberts, a Senior Lecturer at the Central Queensland University in Australia. Not only does this editor have experience teaching thousands of students in locations around the world – many who are studying topics completely online – but he has won awards for his research. Thus, Roberts' experiences as a practitioner and a researcher are adequate qualifications for bringing together these works.

As the full title suggests, *Online Collaborative Learning* presents a blend of theoretical and practical perspectives. While there is a wealth of information about the theory and practice of online learning, the literature about online cooperative and collaborative is lacking. This collection of chapters attempts to fill this gap. Before launching into the pieces themselves, though, Roberts provides a discussion about the concept of collaborative learning, which he

emphasizes is not a new one. He also attempts to clarify the confusion that surrounds the terms "cooperative" and "collaborative" with regards to learning. While new theories of cognition and learning continue to be touted, Roberts notes that formal learning often concentrates solely on individual learning efforts. Moreover, the problems associated with collaborative learning, such as the "free rider effect," make some educators hesitant to adopt this type of strategy.

Following the Introduction, the book continues with Sue Bennett's piece on supporting collaborative project teams using computer-based technologies. The collection concludes with an examination of two concrete evaluation approaches of computer supported collaborative learning (CSCL). While all of the chapters presented in this selection are informative, there are four that are worth mentioning in greater detail. They include the entries by Curt Bonk, Robert Wisher, and Ji-Yeon Lee (Chapter III), John Dirkx and Regina Smith (Chapter VI), Charles Graham and Melanie Misanchuk (Chapter VIII), and Joanne McInnerney and Tim Roberts (Chapter IX).

The work by Bonk, Wisher, and Lee (Chapter III) is unique in that these authors focus their attention on the instructor. Specifically, they examine the ways in which collaborative technologies, as well as the learner-centered movement have affected those teaching in an online environment. In their discussion, Bonk and his colleagues outline 10 key benefits and implications of e-learning. They also discuss 10 problems and their solutions. One point they make is that while the theories have moved toward a more active, learner-centered approach, online learning tools are still rooted in the teacher-centered model. In an attempt to combat this problem, the authors point out that some instructors have developed their own interactive tools. Another aspect that is emphasized by the authors is the creation of a safe, positive environment, as well as timely and constructive feedback. In closing, Bonk and his group examine some of the problems with e-learning, which include grading and support.

Dirkx and Smith (Chapter VI) move their gaze away from the instructor to focus their attention on the students – particularly those who are ambivalent about group work. One thing that is mentioned early on in this chapter is that online technologies often cause these negative feelings toward collaborative activities to increase. To examine this issue in greater detail, the authors conducted case studies on collaborative learning groups in an online graduate course, which were situated within theoretical perspectives associated with collaborative learning and group dynamics. Not only did the students experience problems with collaborative learning, such as unequal contributions of group members and time factors, but the authors found that these individuals often divided the collaborative work into a collection of individual efforts. However, Dirkx and his colleague emphasize that "learning to learn collaboratively often involves a dramatic shift in one's views of teaching and learning" (p. 137).

In Chapter VIII, Graham and Misanchuk examine the issues surrounding computer-mediated learning groups or virtual teams. The authors begin by highlighting the gap that exists in the literature on collaborating at a distance, which tends to focus on the communication aspects rather than on group work as an instructional strategy. In addition to discussing the difference between cooperative and collaborative work, Graham and his colleague continue by defining work groups, learning groups, and virtual teams. In their examination of vignettes from an online master's degree program in instructional technology, the authors present challenges faced by the students. They also note one disappointment: several groups chose to complete their tasks in a manner that was more efficient rather than one that focused more on learning.

For those interested in exploring the differences between collaborative and cooperative learning, the section by McInnerney and Roberts (Chapter IX) is a good starting point. The authors begin by highlighting the fact that cooperative and collaborative learning techniques are not widely

used in higher education. This is in spite of the benefits associated with these methods. McInnerney and her colleague then provide a detailed examination of the literature on the terms, "cooperative" and "collaborative," as well as the confusion and conflation that surrounds them. As the authors point out, "often the title of a paper may use the word cooperative, while the body of the paper discussion collaborative learning or vise versa" (p. 206). In their discussion on the reluctance of university educators to explore new learning paradigms, such as cooperative and collaborative learning, McInnerney and Roberts refer to the work of Panitz. According to their interpretation of Panitz's research, there are five sources for this lack of enthusiasm, which includes students' resistance to collaborative learning techniques – a sentiment which links back to comments made by Dirkx and Smith (Chapter VI).

While these chapters represent some of the strong points in this collection, the book is not without its flaws. One of the weakest sections is the concluding chapter which examines human-computer interaction (HCI) in a social context. This is not to say that the authors – John Nash, Christoph Richter, and Heidrun Allert – do not have a valid entry; they do. The problem is perhaps with its placement in the collection at the end. Rather than summarizing or building on the earlier works, this entry shifts the line of thought in a completely different direction. It is almost as if the editor considered the design element to be missing and tacked it on at the end to satisfy those who are interested in theories surrounding evaluation approaches. In this case, the focus is on scenario-based design and program-theory evaluation. Despite the fact that Nash and his group illuminate these theories with details and examples, it does not provide a very satisfying conclusion to the book as a whole.

Those who are looking for a supplement to Roberts' *Online Collaborative Learning* should consider investigating the writings of Elizabeth F. Barkley, K. Patricia Cross, and Claire Howell Major. In *Collaborative Learning Techniques: A Handbook for College Faculty*, Barkley, Cross, and Major provide detailed procedures for implementing collaborative learning activities in face-to-face and online higher education settings. In contrast to Robert's collection, a book that focuses more on the theory, *Collaborative Learning Techniques* concentrates on practical ways for instructors to use these approaches. The book is divided into three parts – Introduction, Implementing Collaborative Learning, and Collaborative Learning Techniques (also referred to as CoLTs) – and are designed to discuss the "Why," "How," and "What" collaborative learning questions.

In the Introduction, Barkley and her colleagues make a case for collaborative learning. By providing the pedagogical rationale for collaborative learning, the authors frame their discussion around the effectiveness of this method. One of the key points the authors stress in this portion of the book is the notion that students create their own knowledge and are not merely empty receptacles for teachers to fill. It is in this section of the book that Barkley and her group note that much of the research on collaborative learning is centered on K-12, and now higher education is trying to catch up. Like several of the authors in the Roberts collection (e.g., Dirkx and Smith; Graham and Misanchuk), Barkley, Cross, and Major attempt to clarify the difference between cooperative and collaborative learning. One piece of information that they include that is not specifically mentioned in many other writings is that cooperative learning got its beginnings as an alternative to the "overemphasis on competition in traditional education" (p. 5). Also, the authors propose that perhaps a new term is needed to move away from the confusion that surrounds cooperative and collaborative learning. While Barkley and her colleagues quickly dismiss this option, the possibility lingers in their use of the acronym, CoLTs.

In Part 2 of this book, the authors examine ways to create productive learning environments through collaborative learning groups. As Barkley and her group stress, "embarking upon

collaborative learning should be a reasonable adventure – stimulating, challenging, and requiring thoughtful advanced planning" (p. 27). This section focuses on implementing collaborative learning and examines issues such as orienting students, structuring the learning tasks, and facilitating student collaboration. Also, forming groups can be an unnatural process, and this section describes three types of groups instructors can use – informal, formal, or base. As the authors note, the type of group will depend on the nature of the assignment, the duration of the task, and in some cases, the arrangement of the physical setting. Further, the authors provide a chapter on grading and evaluating collaborative learning assignments and projects.

While it is difficult to argue with the materials presented by the authors, one comment they make in Part 2 is questionable. They discuss the lack of research that examines groups that fail, as well as those that investigate these experiences on learning. Barkley, Cross, and Major also indicate that they found no work that examines the impact of collaborative learning on teachers. However, Roberts includes a chapter in his 2004 collection, *Online Collaborative Learning* by Bonk, Wisher, and Lee that examines this topic. Because these two titles were published a year apart, it is possible that Barkley and her colleagues did not have access to the chapter by Bonk and his colleagues. Nonetheless, this oversight stands out, particularly if these two books are read together.

The final section, Part 3, is subdivided into five parts that include a total of 30 collaborative learning techniques for discussion, techniques for reciprocal teaching, techniques for problem solving, techniques using graphic information organizers, and techniques focusing on writing. With this section, the authors strive to provide answers to the question, "What can I do, in a practical way, to engage students actively in collaborative learning?" (p. xiv). Each of these subcategories outlines step-by-step instructions for at least five activities that can be implemented in the classroom. As the authors write, this section is "like a collection of well-tested recipes" (p. 95). For those teaching at a distance, details about the option to transfer the activities to an online forum are provided, as well.

Teachers, researchers, students, and designers who are interested in the theoretical foundations of collaborative learning will find the chapters in *Online Collaborative Learning* worthwhile. The diverse array of authors provides a rich assortment of perspectives on the computer-supported collaborative learning. However, individuals who are looking for detailed ways to incorporate these techniques into the curriculum will find this book lacking. As the title suggests, practice is incorporated into the discussion, but it is presented in a more formal and academic manner. For those seeking practical assistance in incorporating collaborative learning methods into the curriculum, *Collaborative Learning Techniques* by Barkley, Cross, and Major serves as a logical companion piece that extends the theory from the perches high atop the ivory tower of academia to the front lines of the classroom. Emerging technologies are changing the way individuals communicate, collaborate, and learn through social interaction. Thus, the importance of the content of the books described in this review will only increase as these new tools impact teaching, learning, and creativity in educational settings.

References

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