Will Team-Based Learning Mesh Well with Library Instruction?

Susan Metcalf, New Mexico State University

Instruction offered by academic libraries has evolved greatly in the last two decades. This growth is intertwined with the evolution of pedagogical practices in other academic disciplines, and is a necessary response to advances in technology and changes with regards to students' behavior and preferences, as evidenced in the "gen x" and "millennial" phenomena. This article looks at Team-Based Learning (TBL), a teaching paradigm conceived by Larry Michaelson when he taught at the University of Oklahoma. This is not team teaching, where two instructors collaborate, or a casual use of small groups. By Michaelson's definition, the teams in TBL are static throughout a given course, and this precludes using it to design one-shot library instruction sessions. It could, however, be used as a framework in for-credit library instruction courses. Although TBL has not yet emerged as a favorite tool in library instruction, it has much in common with other models that have been embraced. This article examines TBL in the context of current library instruction, and discusses some pros and cons of its use.

The author attended a workshop conducted by Michaelson and L. Dee Fink, sponsored by the New Mexico State University Teaching Academy, and then took part in a book discussion group covering the text *Team-based learning: A transformative use of small* groups in college learning (Michaelson, Knight, Fink, 2004). Part of the discussion included observing inperson several classes based on the TBL model. As a result, she is using TBL to redesign an upcoming threecredit course entitled LIB311 Information Literacy.

An Overview of Team-Based Learning

Michaelson began experimenting with the use of teams in classes in the 1970s, after his class size had burgeoned from 40 to 120 (Michaelson, 2004, p.vi). He had used group work in the smaller class and found it effective. In their text, Fink defines TBL as "a particular instructional strategy that is designed to (a) support the development of high performance learning teams and (b) provide opportunities for these teams to engage in significant learning tasks" (p.9). A major component of this use of teams, as opposed to many class small group activities, is that the teams remain constant throughout the course. Teams are the focal point of the class' instruction and its curricular design; they are not just a tool to engage stu-

dents in more active learning.

In his chapter "Getting started with Team-Based Learning" Michaelson (p. 28) delineates four essential principles to implementing his approach:

- 1. Groups must be properly formed and managed
- 2. Students must be made accountable
- 3. Team assignments must promote both learning and team development
- 4. Students must receive frequent and immediate feedback

Fink maintains that TBL can be differentiated from other instruction models in that it is a strategy, not a technique (p.9). He acknowledges that instructors will modify the strategy—most probably in response to fit their own teaching styles and the specific requirements of the subject discipline.

TBL, Active Learning, and Related Practices

Library instructors, and those who teach library instructors to teach, have long embraced the pedagogical concept of active learning, sometimes referred to as experiential learning. The basic tenets of this approach, that students prefer to be active participants in their education and that learning is enhanced when lectures are not the primary mode of instruction, are now generally accepted. The literature is replete with articles that advocate active learning and discuss its merits. For example, Gresham's (1999) article explains experiential learning, or "learning by doing", which is related to the now widely-accepted concept of active learning. He argues that the onset of wired classrooms in libraries has enabled library instruction to grow from the lecture-based to hands-on, and thus move from passive to active learning.

As the practice of active learning evolves, educators, prompted and enabled by major changes in technology and in student demographics, have naturally spawned new methodologies, models, and structures. In a discussion of these trends on the Carnegie Foundation for the Advancement of Teaching's website, Pat Hutchings (2005) notes that there are:

...energetic conversations and communities that have grown up around various teaching approaches. Faculty

interested in collaborative learning--where students learn from one another in structured small groups--can now find colleagues on just about every campus in the country, as well as a growing body of literature.

In addition to collaborative learning, Hutchings mentions other teaching approaches, such as learning communities, problem-based learning, and service learning. Team-Based Learning, a close cousin of collaborative learning, could be added to her list. TBL has its own website at <u>http://www.ou.edu/idp/teamlearning/</u>, and its own listserv, listed on that site. It also provides links to other TBL websites at the Baylor College of Medicine and Wright State University School of Medicine, among others.

As these discussions and communities grow and the literature emanating from them evolves so does the accompanying terminology. Just as "active learning" is often interchangeable with "experiential learning", "collaborative learning" is sometimes synonymous with "cooperative learning". Keyser's (2000) article "Active learning and cooperative learning: Understanding the difference and using both styles effectively" is an excellent introduction to these concepts as they apply to library instruction. She includes advice on how to choose and apply active and cooperative learning methods by ensuring that the technique is tied to achieving a particular instructional goal.

Collaborative learning combines active learning with another popular teaching model-- small group work. Small group work, like active learning, has been in use for some time. In part, group work succeeds because it is a form of active learning. Another emerging teaching method that has had some coverage in library journals, as well as other academic literature, is problem-based learning (PBL). Carder, Willingham, and Bibb's 2001 article "Case-based, problem-based learning: Information literacy for the real world" provides an overview of one problem-based approach, and the article's reference list can be consulted for further reading on PBL.

So how does TBL fit in with these more common instruction approaches? Although no articles were found to have addressed TBL use in library instruction, authors in other disciplines have discussed its use. TBL is popular in medical schools, as instructors can readily see the benefits their students would receive from learning how to function in teams. It is interesting to note that PBL also started in medical schools.

Pros and Cons of using TBL in Library Instruction

Due to its inherently "active learning" nature, Team-Based Learning is a good choice for librarian instructors who don't mind letting go of some control of the class and/or feel that lecturing is not their strong suit. Another pro of TBL is that it provides a proven framework for course design. The course is first divided into macrounits (four to seven are recommended) which correspond to the major course topics. Some examples of major topics for an information literacy course are evaluating information sources and developing research strategies. These topics are then translated into learning objectives and goals, just as in other curriculum design methodologies, but with a recommended instructional activity sequence that starts with the study of basic concepts and concludes with graded problem solving.

The biggest negative to overcome may be students' resistance to working in groups. Some will fear that it is unfair to grade their performance based on their teammates; others may be shy or less socially adept. Michaelson would argue that learning to overcome these obstacles, which students will most likely face when they join the workforce, is one of the greatest benefits of the method. Additionally, consideration for group members who were "social loafers" can be partially accounted for in the grading method (e.g., having students anonymously grade each other).

TBL also may be too much for those instructors who are adept at lecturing and feel their lectures contribute to their students' learning experience. If these instructors want to include small group activities on a smaller scale or with less structure, they should consider cooperative learning or another more flexible approach.

But beyond individual instructor's preferences and abilities, the suitability of TBL in Library Instruction courses should be compared with established practices in the discipline. An appropriate starting point for this would be the ACRL's best practices guidelines (2003). Category 7 addresses pedagogy for information literacy programs and contains seven criteria, including "includes active and collaborative activities" and "supports studentcentered learning", which are definitely supported by TBL theory. Other criteria, such as "encompasses critical thinking and reflection" and "links information literacy to ongoing coursework" are certainly possible to incorporate into the course work.

Conclusion

While the literature indicates it has not been widely used, Team-Based Learning can be an effective teaching paradigm for use in library instruction courses, especially for teachers that enjoy utilizing pre-conceived frameworks, such as Michaelson's, and can design effective assignments. As library instruction increases in importance, it is vital new strategies are explored, utilized, and refined in order to continue to provide the best learning environment for students.

(Utilizing Filmmaking...Continued from page 3)

An important aspect to remember is that all elements of the model need to be clearly present in the assignment or project. The assignment should help move students beyond basic skill sets to applying higher level analysis to the final outcome or product.

As instruction librarians rise to meet the challenge of the new generation entering colleges and universities, barriers and obstacles will undoubtedly be present. While keeping an eye on the Millennials' preferences for learning and technology, utilization of various learning and instructional models, such as the Information Fluency model, can help minimize road blocks. Using creative and innovative approaches to teaching the foundations of information literacy, technology literacy, and critical thinking will ensure students have an engaging and relevant learning experience. The filmmaking process is one way professors and instructors can bridge the generational gaps and propel college students towards information fluency. Association of College and Research Libraries. (2003). Characteristics of programs of information literacy that illustrate best practices: a guideline. Retrieved January 20, 2006, from http://www.ala.org/ala/acrl/acrlstandards/ characteristics.htm.

Carder, L., Willingham, P., and Bibb, D. (2001) Casebased, problem-based learning: Information literacy for the real world. *Research Strategies 18*(3), 181-90. Retrieved January 20, 2006, from http:// www.sciencedirect.com/.

Gresham, K. (1999). Experiential learning theory, library instruction, and the electronic classroom. *Colorado Libraries 25*(1), 28-31. Retrieved February 13, 2006 from WilsonSelect database.

Hutchings, P. (2005) Building a better conversation about learning. *Carnegie perspectives*. Retrieved February 13, 2006, from http://www.carnegiefoundation.org/ perspectives/sub.asp?key=245&subkey=582.

Keyser, M. (2000) Active learning and cooperative learning: understanding the difference and using both styles effectively. *Research Strategies 17*, 35-44.

Michaelson, L., Knight A., and Fink, L., (2004). *Teambased learning: A transformative use of small groups in college teaching*. Sterling, VA: Stylus.

References

Abram, S. & Luther, J. (2004, May 1). Born with the chip. *Library Journal*, *129*(8) 34-37.

Bates, A. W., & Poole, G. (2003). *Effective teaching with technology in higher education: Foundations of success*. San Francisco: Jossey-Bass.

Dede, C. (2005). Planning for neomillennial learning styles: Implications for investments in technology and faculty. In D. G. Oblinger & J. L. Oblinger (Eds.), *Educating the net generation* (pp. 15.1-15.22): EDUCAUSE. Retrieved February 22, 2006, from http://www.educause.edu/educatingthenetgen.

Clayton-Pedersen, A. R., & O'Neill, N. (2005). Curricula designed to meet 21st-century expectations. In D. G. Oblinger & J. L. Oblinger (Eds.), *Educating the net generation* (pp. 9.1-9.16): EDUCAUSE. Retrieved February 22, 2006, from http://www.educause.edu/educatingthenetgen.

Sharkey, J. (2005, April 16). *GS 175 information strategies*. Retrieved May 10, 2005, from http://web.purdue.edu/ ~sharkeyj/gs175/.