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Cooperative Learning: May the Circle be Unbroken

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Cooperative learning, a highly structured form of collaborative student learning, began in the lower grades. In 1989/1990, Robert Slavin wrote a guest editorial in a well-respected journal questioning whether or not cooperative learning had staying power. His audience, K-12 teachers and administrators, was familiar not only with cooperative learning but also with the "hype" that had accompanied it. Slavin expressed two concerns: (1) that inexperienced, well-meaning teachers might undercut the cooperative learning movement by ill-structured applications; and, (2) that cooperative learning might be "oversold" and "undertrained" (p. 3).

In the past decade, the cooperative learning movement has gradually spread to the higher education arena, and Slavin's concerns have in general been laid to rest. For example, a 1995 faculty survey conducted by the Higher Education Research Institute at the University of California at Los Angeles indicated that, aside from lecture, topping the list of teaching methods used in all or most courses was "cooperative learning" showing a 9% increase from 1989 to 1995, followed by "group projects" with a 7% increase (Magner, 1996).] In the new millennium, cooperative learning has become a staple of many teaching conferences and faculty development efforts.

Here to Stay Here are just a few of the reasons for cooperative learning's staying power.

* The established research base of cooperative learning -- much of it now at the higher education level -- gives even skeptical faculty compelling reasons to adapt its structured approach. Cuseo (1992) finds cooperative learning to be "the most researched and empirically well-documented form of collaborative learning in terms of its positive impact on multiple outcome measures" (p. 3). Such outcomes include not only increased academic achievement, but also affective outcomes important to most faculty: increased self-esteem, more harmony in multi-ethnic classrooms, higher attendance, and greater liking for the subject matter. A highly respected meta-analysis examines cooperative learning's positive impact in science courses (Springer, Stanne, & Donovan, 1998). Another work examines its specific effects on critical and creative thinking, reasoning and problem-solving skills (Davidson & Worsham, 1992). Support for cooperative learning emerges from virtually all areas of educational research. For example, Astin's (1993) comprehensive longitudinal study of the impact of college on undergraduate students determined the significance of two factors in particular -- student-student interaction and student-faculty interaction -- both of which are also important attributes of cooperative classrooms. He declares: "Classroom research has consistently shown that cooperative learning approaches produce outcomes that are superior to those obtained through traditional competitive approaches . . ." (p. 425-427). Competitive approaches often lack the purpose and structure of cooperative learning.

* Thus, adopting a structured, cooperative approach offers faculty members both the philosophical approach and the specific tools to transform their teaching. The philosophy is a constructivist theory of learning that places the responsibility for students' learning on the students themselves. Students, however, are not left to flounder: they receive support from their teachers and from their peers. The tools are carefully delineated "structures" -- the empty shells that faculty can fill with their discipline-specific course content. Structures include a wide variety of activities suitable for different objectives. For example, a roundtable activity where student teams of 4-5 add ideas to a rotating paper as they say them aloud, provides a structured brainstorming technique.

Additionally, books such as those by Johnson, Johnson, and Smith

(1991) and Millis and Cottell (1998) offer proven classroom management techniques and a host of other practical ideas. Because of cooperative learning's highly structured nature, faculty therefore do not need to reinvent the cooperative wheel. Cooperative learning offers a systematic, student-centered approach to instruction without putting anyone into a pedagogical strait jacket. Lecturing and other approaches thus complement the cooperative principles.

* The key principles of cooperative learning provide both structure and flexibility. These principles are individual accountability (no undifferentiated group grades); positive interdependence (students have valid reasons to work together); and attention to group processes and productive social skills, including listening and providing feedback. Cooperative learning meshes with virtually every well-respected pedagogical approach. Cases, for example, can be adapted to a cooperative format (Millis, 1994). Approaches such as the double-entry-journal, popularized by the writing-across-the-curriculum movement, can be modified to include peer sharing and coaching as students read and discuss one another's products. Classroom assessment, problem-based learning, and academic games can all be enhanced through a cooperative approach. Technology and cooperative learning are natural partners, thanks to e-mail, web-based teaching, and collaborative software packages such as Lotus Notes or Blackboard. Not surprisingly, virtual team performance requires many of the attributes of well-conducted classroom cooperative learning: attention to planning, executing, and rewarding the tasks and care in structuring individual accountability and mutual interdependence.

Not a Fad Cooperative learning is not a fad because it satisfies the deepest longings of teachers. It allows us to be student-centered without abrogating the responsibility of shaping a class based on our experience and expertise. It provides us with the tools to structure activities that maximize learning. It helps us foster not only learning, but also a host of other positive outcomes such as increased self-esteem, respect for others, and civility. It can transform our large, diverse lecture classes into a community of supportive teams. Cooperative learning satisfies a human desire for connection and cooperation. In addition to keeping students energized and awake, it gives them the support to tackle complex tasks impossible to

complete alone. It also gives them essential social and communication skills needed for success in the workplace. Finally, for both teachers and students, cooperation makes learning fun.

For some, cooperative learning can have a transformational impact. Davidson (2000), a former President of the International Association for the Study of Cooperation in Education, began using cooperative learning over 30 years ago with the specific question, "Will it work in my math classes?" During a recent presentation, he offered a later vision, one that experienced cooperative practitioners often share: "We know the skills -- teamwork, problem-solving, and conflict resolution -- that create ideal citizens in a democratic society. How can I be certain that these transferable skills are modeled, practiced, and reinforced for the greater good of society?"

Garth (1999) in some recent reflections on his groundbreaking, *Learning in Groups*, agrees that cooperative learning is still on the "upswing." He concludes with these eloquent words: "With a possible convergence of nonlecture teaching approaches, collaborative and cooperative learning may appear less frequently on sign posts of beautiful but narrow roadways and more often as fellow travelers in a broad-bandwidth world leading toward enhanced learning" (p. 60).

Note: Special thanks go to ideas provided by Dr. Neil Davidson, Associate Dean, Office of Undergraduate Studies, University of Maryland.

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