## Creating a Positive Climate



# **Cooperative Learning**

(2<sup>nd</sup> Edition)

#### Resources

- Cooperative Learning Center at the University of Minnesota, Co-directors Roger T. Johnson & David W. Johnson, <a href="http://education.umn.edu/research/Research/Research/Works/coop-learning.htm">http://education.umn.edu/research/Research/Works/coop-learning.htm</a>
- Success for All Foundation, 200 West Towsontown Blvd., Baltimore, MD 21204-5200, 1-800-448-4998; www.successforall.net

#### **Materials**

- Dishon, D., & O'Leary, P. W.
   (1984). A guidebook for cooperative learning: A technique for creating more effective schools. Holmes Beach, Florida: Learning Publications, Inc.
- Johnson, D., & Johnson, R.
   (1975). Learning together and alone. Englewood Cliffs, NJ:

   Prentice Hall.
- Kagan, S. (1994). Kagan cooperative learning. San Juan Capistrano, CA: Kagan Cooperative Learning.
- Slavin, R. E. (1990). Cooperative learning: Theory, research, and practice. Englewood Cliffs, NJ: Prentice Hall.
- Slavin, R. E. (1991). Student team learning: A practical guide to cooperative learning, Third Edition. Washington, DC: National Education Association of the United States.

Cooperative learning has received increased attention in recent years due to the movement to educate students with disabilities in the least restrictive environment. Children with disabilities bring social needs, as well as academic needs, which are not easily met in the regular classroom. The use of classroom cooperative learning peer groups with cooperative goal structures may be a useful teaching approach for all students, but in particular it has been useful in serving students with disabilities in general education classrooms. In addition, it may also serve as a vehicle for improving student social skills and the overall social and academic climate for a school. As a result, it might also be considered to be an intervention in promoting appropriate behavior of students in school and thus preventing violence by creating a positive behavioral climate in a school.

### What is Cooperative Learning?

Cooperative learning has been defined as "small groups of learners working together as a team to solve a problem, complete a task, or accomplish a common goal" (Artz & Newman, 1990, p. 448). The cooperative learning model requires student cooperation and interdependence in its task, goal, and reward structures. The idea is that lessons are created in such a way that students must cooperate in order to achieve their learning objectives.

Although the basic principles of cooperative learning do not change, there are several variations of the model. The leading developers of cooperative learning include Robert Slavin, Roger and David Johnson, and Spencer Kagan, all of whom have slightly different approaches and emphases (Metzke & Berghoff, 1999). Johnson and Johnson (1975) focus on developing a specific goal structure that can be incorporated with a variety of curricula, with an emphasis on integrating social skills with academic tasks. Kagan's work focuses on the use of many different goal structures to help facilitate active learning, team building, and group skills. Slavin's work utilizes methods from both the Johnsons and Kagan, and has resulted in the development of specific cooperative learning lesson structures.

Several approaches to cooperative learning include Circles of Learning (Johnson, Johnson, Holubec, & Roy, 1984), Student Teams Achievement Divisions (STAD), Jigsaw, Group Investigation, and the Structural Approach (Arends, 1997). These are all specific models teachers can use to set up cooperative learning groups and to structure lessons. Cooperative learning has been employed across all age groups and all subject areas.

Advocates of cooperative learning strategies suggest that academic learning is improved for all students involved, in part because the learning is active and involves using the resources of a group of peers which all have an interest in helping all of their group members attain learning goals. In addition, advocates claim that the process of cooperative learning results in improved social skills, feelings of self worth, and a sense of community or belonging because lessons are structured in such a way that all participants become valuable, contributing members of the group. The later has made cooperative learning a particularly useful strategy for students with emotional or behavioral needs.

## What We Know About Cooperative Learning?

The effects of cooperative learning activities have been positive for increased academic achievement in recent empirical studies conducted among students with and without disabilities. In considering the effects of cooperative learning on academic achievement, researchers have repeatedly examined cooperative versus individualistic instruction. Recent studies have evaluated the effects of cooperative and individualistic

learning experiences by comparing achievements of academically disabled, normal-progress, and gifted students. Results indicate that cooperative learning experiences promote higher achievement and greater retention than do individualistic learning experiences for all students (Stevens & Slavin, 1995).

Cooperative learning, in addition to impacting academic achievement, also positively influences attitudes towards students with disabilities. Cooperative learning's effects on attitudes are evidenced by increases in self-esteem, social acceptance, and teacher ratings of students with disabilities (Putnam, Markovchick, Johnson, & Johnson, 1996). Cooperative learning has also been used as a vehicle to guide and shape student behavior (Johnson & Johnson, 1975) by having peers assist in developing and shaping social skills.

## **Making It Work**

In incorporating cooperative learning strategies into the classroom curriculum, two factors have been found to contribute to positive achievement effects: Group goals and individual accountability (Slavin, 1996). Group goals are necessary to motivate students to help each other learn by giving them a stake in one another's success. Individual accountability, in turn, deters the likelihood that one or two group members will do all the work. If the group's success depends on the individual learning of each group member, then group members are more motivated to engage every member in mastering the material being studied.

The Student Teams Achievement Divisions (STAD). developed by Robert Slavin and his colleagues at Johns Hopkins University, is perhaps the simplest and most straightforward of the cooperative learning approaches (Arends, 1997). In STAD, students within a given class are assigned to four- or five-member learning teams, each of which has representatives of both sexes, various racial or ethnic groups, and high, average, and low achievers. After the teacher has introduced the academic material, team members use worksheets to master the academic materials and then help each other learn the material through tutoring, quizzing one another, or carrying on team discussions. The students also receive worksheet answer sheets, emphasizing the importance of learning the concepts rather than simply filling out the worksheets. Following team practices, students individually take quizzes on the material they have been studying. These quizzes are scored and each individual is given an improvement score. This improvement score is based on the degree to which the score exceeds a student's past averages, rather than on a student's absolute score. Weekly newsletters announce teams with the highest scores and students who have exceeded their own past records by the largest amounts or who have perfect scores on the quizzes.

The success of cooperative learning strategies is not automatic. Group composition and group interaction processes have been found to impact the success or failure of cooperative learning groups. Teachers should provide the groups with initial

training on cooperative learning procedures as well as group social skills. Teachers should continue to provide on-going monitoring and reinforcement to the students for implementing the procedures. Teachers can also unobtrusively monitor group activities so as to provide the appropriate level of help at the appropriate time and to prevent the problems of group domination, status effects, and "social loafing." When including students with disabilities in cooperative learning groups, it is important to consider the age of the students, as well as, accommodations by peers and the type and severity of the disability. Where these groups have not been used in the past, it may take some time for students to learn how to interact within these groups successfully.

#### Conclusion

Cooperative learning strategies appear to promise positive effects for students, both with and without disabilities, as reflected in increased academic achievement and improved social attitudes and behavior. The general principle behind cooperative learning is that the students work together as a team to accomplish a common goal, namely that each student learns something of value from the cooperative learning activity. Although cooperative learning activities may require more teacher preparation of group material and monitoring of group activities, the rewards and benefits for both the teacher and students go a long way. They appear likely to positively influence a school's academic and social climates as well.

- Courtney K. Miller & Reece L. Peterson, Second Edition., June, 2003

#### References

- Arends, R. I. (1997). *Classroom instruction and management*. New York: The McGraw-Hill Companies, Inc.
- Artz, A. F., & Newman, C. M. (1990). Cooperative learning. *Mathematics Teacher*, 83, 448-449.
- Johnson, D., & Johnson, R. (1975). *Learning together and alone*. Englewood Cliffs, NJ: Prentice Hall.
- Johnson, D., Johnson, R., Holubec, E., & Roy, P. (1984). Circles of learning: Cooperation in the classroom. Alexandria, VA: Association for Supervision and Curriculum Development.
- Metzke, L., & Berghoff, P. (1999). Cooperative learning in the classroom. In A. S. Canter & S. A. Carroll (Eds.), *Helping children at home and school: Handouts from your school psychologist* (pp. 147-150). Bethesda, MD: National Association of School Psychologists.
- Putnam, J., Markovchick, K., Johnson, D. W., & Johnson, R. T. (1996). Cooperative learning and peer acceptance of students with learning disabilities. *The Journal of Social Psychology*, 136, 741-752.
- Slavin, R. (1996). *Education for all*. Exton, PA: Swets & Zeitlinger Publishers.
- Stevens, R. J., & Slavin, R. E. (1995). The cooperative elementary school: Effects on students' achievement, attitudes, and social relations. *American Educational Research Journal*, 32, 321-351.

## **About the Safe and Responsive Schools Project**

The Safe and Responsive Schools Project, funded by the U.S. Department of Education, Office of Special Education Programs, is dedicated to developing prevention-based approaches to school safety, discipline reform and behavior improvement in schools.

Websites: <a href="http://www.indiana.edu/~safeschl/">http://www.indiana.edu/~safeschl/</a> or <a href="http://www.unl.edu/srs/">http://www.unl.edu/srs/</a> Or Contact:

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