

COOPERATIVE LEARNING

BY PHIL BASSETT

*Is cooperative
learning
suitable for
the Christian
classroom?*

Have you ever wished for a proven teaching method that would help your students achieve more academically, while teaching them social skills and improving their attitude toward school? Does this sound like an unattainable dream? A large body of research, as well as my own observation in dozens of classrooms, says that it is not only possible but actually happening in public and private schools around the world.

The teaching strategy I'm referring to is cooperative learning. While not a panacea that provides magical results, when implemented well, even on a beginning level, it can have a positive effect on classrooms.

What Is Cooperative Learning?

"Cooperative learning" refers to many different ways to organize classroom instruction so that students work and learn in small groups of two to five. It is one of the most popular and important educational innovations of recent years. Researchers have carried out hundreds of studies, making cooperative learning one of the best-investigated innovations of the 20th century. Applied, basic, and program-level research related to cooperative learning have repeatedly demonstrated its effectiveness as a teaching model.

Here are some basic questions about cooperative learning that this article will address:

- Why use cooperative learning?
- What makes cooperative learning work?
- Is cooperative learning suitable for the Christian classroom?

Why Use Cooperative Learning?

Cooperative learning has a strong theoretical and research base. It has been shown to promote academic achievement, social-skills development, and personal growth. Interracial and cross-handicap relations are improved, as are other interpersonal relationships. Students who learn through cooperative-learning strategies are better motivated, like school better, have higher self-esteem, and are more concerned about others.

Consider the following points:

- Compared to individualistic and competitive learning, cooperative experiences promote more interpersonal attraction among students and more positive attitudes toward peers.¹
- "All [cooperative learning] methods have had some positive effects on intergroup relations. . . . The practical implications . . . are unambiguous. There is a strong positive

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effect of cooperative learning on intergroup relations.”²

- Cooperative learning research on achievement has been extensively and carefully reviewed. Roger and David Johnson of the University of Minnesota reviewed 122 cooperative learning achievement studies,³ Robert Slavin of Johns Hopkins University reviewed 60 studies that contrasted cooperative learning and traditional methods,⁴ and the National Center on Effective Secondary Schools reviewed 27 studies on cooperative learning and achievement in grades 7-12.⁵ The analyses of these three reviews indicate that cooperative methods can and usually do have a positive effect on student achievement.⁶

- Johnson and Johnson⁷ found that cooperative learning was linked to higher levels of self-esteem and positive attitudes toward school and teachers.

- In Slavin’s summary of research on cooperative learning and academic achievement, he concluded that cooperative methods incorporating group goals and individual accountability accelerate student learning considerably. “Current knowledge is more than enough to justify the expanded use of cooperative learning as a routine and central feature of instruction,”⁸ he wrote.

Since the research clearly shows that

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cooperative learning is an effective teaching strategy, the next question teachers might ask is, “How do I make it work in my classroom?”

What Makes Cooperative Learning Work? Two Critical Elements

Successful cooperative learning relies on two essential elements: (1) groups and tasks are structured to promote *positive interdependence* and (2) the teacher provides for *both individual and group accountability*. (This assumes that classroom management is not a serious problem and that

students are not being asked to work significantly beyond their abilities.)

Building Positive Interdependence

Positive interdependence means that students work together to achieve a group goal and that they have an interest and a stake in one another’s success.

I find that roughly one-third of the students (and sometimes more) would prefer to work alone on assignments, and that almost all students would rather work alone if doing so is easier. To build positive interdependence, group work must not be easier for students to do alone and a group’s success should be linked to the successful inclusion of each group member. The sidebar on page 21 suggests five ways to build positive interdependence.

Building Individual and Group Accountability

Individual and group accountability are essential to successful cooperative-learning groups. We don’t simply tell students to learn their math or spelling words and then never check up on them! Neither should we tell students to work together in groups without holding them accountable for the knowledge or tasks associated with the group work. Students can be held account-

Building Positive Interdependence

- Limit materials to one set per group, so that students need to share. This can be done by giving a group one text, one set of lab or art materials, one set of math manipulatives, or one map to share.

- Create a “jigsaw” and give individual members of the group “pieces” that must be put together. For example, children can each be given part of a reading assignment to read and report to the group. The same can be done with a list of spelling or vocabulary words or the parts of word problems in math. The students cannot do the work alone, because they don’t have the whole assignment, and every individual’s success depends on the success of the rest of the group.

- *Assign roles* to students in the group or allow them to choose roles within their group. For example, you might designate roles of notetaker, time-keeper, reader, and checker. Students decide who will do each job. Have them rotate roles each time the group meets.

Other commonly assigned roles are materials handler, “gofer,” reporter, and encourager. You can develop specific roles for a particular group task.

- Require only one product from the group rather than one from each student. This might mean one set of chapter review questions, one lab report, or a single set of solutions to math word problems by each group. Students may divide up the work, but they should check one another’s work, since all of their names are on the final product.

- Use rewards to foster interdependence. This is one of the fastest ways to build positive interdependence. Follow this important guideline: Reward all groups who meet your specific criteria, rather than the “first” or “best” group. For example, reward all groups who complete their task in 10 minutes instead of only the first group finished. All groups should feel they have a chance to earn the reward. Rewards can be bonus points on quizzes or tests, reward stickers or certificates, or team points recorded on a chart.

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able for a product (some kind of written assignment), for knowledge (facts to be learned), or for a process (discussion, brainstorming, or use of a social skill).

Ways to strengthen individual and group accountability are offered in the sidebar on page 21.

Other Elements for Successful Cooperative Learning

If cooperative learning is not working well in your classroom, building positive interdependence and ensuring individual and group accountability should improve

things dramatically. Other important elements of cooperative learning that, if implemented, also help cooperative groups work more smoothly and give the method more power include the following:

- *Face-to-face interaction* is a simple but important element of cooperative learning. When working together in groups, students should generally face each other “knee to knee and eye to eye.” They should also be at the same level, that is, all of them should be sitting in chairs, or all standing, or sitting on the floor. A group of students sitting at a big table or side by side in a row will not have face-to-face interaction. Show students how to quietly put their desks together or move their chairs into a circle, practicing this task until they accomplish it quickly and quietly.

- *Processing group dynamics* is another important element of cooperative learning. It involves taking two to five minutes after a cooperative-learning activity to discuss the dynamics of working in a group. The goal is to help each group figure out ways to work together better the next time.

Discussion can focus on the ways the group shared or cooperated or practiced a social skill like kindness. It can focus on simple things like how the students decided who would go first or who would do a cer-

Individual and Group Accountability

- Have students “sign off” on their group work. If doing a worksheet together, they can sign the worksheet, signifying, “I participated in this work and agree with the answers.” Students can briefly explain exceptions if they do not agree with all of the answers. This is not guaranteed to build accountability, but it does establish expectations.

- Call students at random to explain their group’s answer, demonstrate its math problem, or tell what their partner shared in a discussion. I randomly select cards from a pack of index cards that has one student’s name on each card.

- Have each group turn in a brief report of its work, telling what was accomplished, who did which roles, what students learned, and how their group worked well or would improve their techniques next time.

- Have individual students complete a worksheet related to the work that they did in the group.

- Give a quiz or test to individual students over the material the group studied together. This works well for almost all content areas.

- Monitor and record specific actions while the groups are working. Tell the groups that you will be watching for specific behaviors such as “using quiet voices” or “using the glossary to find definitions.” Take notes on what you observe. Give these to the groups later or discuss them with the class as a whole.

tain job. If they lack important social skills, the students will at first have difficulty working in cooperative groups. This makes it even more crucial for them to develop the skills necessary to work together. Sometimes groups must learn and practice basic skills like “using quiet voices” or “taking turns.”

As students become accustomed to working in cooperative groups, you can introduce more-sophisticated skills like “kindness,” “disagreeing agreeably” or “re-stating other people’s important ideas” for them to practice.

Cooperative learning has been shown to promote academic achievement, social-skills development, and personal growth.

Cooperative Learning and the Christian Classroom

Some educators wonder if cooperative learning is appropriate for the Christian classroom because the method is used and promoted by some educators whose worldview and philosophy of education are markedly different from that of Christian educators.

Reading groups and learning games are also used by educators who do not have a biblical worldview, as are computers, textbooks, math worksheets, and various lecture methods. Does that mean that they are not appropriate for the Christian classroom? We must judge teaching methods on the basis of their suitability for our classrooms and objectives. We can do this in relation to cooperative learning by looking at what the Scriptures and a Christian philosophy of education have to say about cooperative learning concepts, rather than looking at the philosophies of people who use and promote cooperative learning in the secular classroom:

- Is it biblical for children to sometimes work together for the common good in their classroom?

- Is it biblical for those whom God has gifted in special ways to sometimes use their gifts to help others?

- Is it biblical for children to learn concern for classmates’ needs as well as their own?

- Since problems with interpersonal relationships are a major factor cited by first-term missionaries for not returning to the field, is it biblical to teach children to work with others, while also teaching them to work independently?

My answer to all of these questions is a resounding *Yes*. These should be essential concerns in Christian schools.

The following verses are a few of my favorites that apply to cooperative learning. They were not written to suggest teaching methodology, but they do address the attitudes that we should hold about children working together in cooperative groups.

- “Each of you should look not only to our own interests, but also to the interests of others” (Philippians 2:4, NIV).⁹

- “For I know your eagerness to help, and I have been boasting about it to the Macedonians” (2 Corinthians 9:2).

- “The eye cannot say to the hand, ‘I don’t need you?’ On the contrary, those parts of the body that seem to be weaker are indispensable” (1 Corinthians 12:21, 22).

- “Carry each other’s burdens, and in this way you will fulfil the law of Christ” (Galatians 6:2).

Summary

Cooperative learning is one of the most widely researched educational innovations to come on the educational scene in recent years. Studies indicate that it promotes academic achievement, builds positive intergroup relations, and is related to improvements in self-esteem, altruism, and positive attitudes toward school.

Cooperative learning can be made even more successful by strengthening positive interdependence and individual and group accountability. Teachers can get more power from cooperative groups by developing face-to-face interaction and by processing group dynamics.

Cooperative learning fits well with a biblical perspective for education. Concern about the philosophies of others who use and promote cooperative learning should not prevent Christian teachers from using it in their classrooms.

Like any new and effective teaching method, cooperative learning will not be easy for all teachers to implement. However, the benefits and rewards of having children work together cooperatively in the classroom should make the effort worthwhile. ☞

Look for more ideas on cooperative learning in a future theme issue of the JOURNAL.

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Cooperative Learning Resources

- *Cooperative Learning: The Magazine for Cooperation in Education*. This excellent periodical has research, practical tips and ideas, and lesson plans—something for everyone at every level of education. It's easy to read and is published by the International Association of the Study of Cooperation in Education (IASCE), Box 1582, Santa Cruz, CA 95061-1582. (408) 426-7926.

- Spencer Kagan, *Cooperative Learning* (1992). This book explains literally dozens of cooperative-learning "structures" ranging from the very simple to the fairly complex, in an easy-to-read format. It includes some theoretical background and also help with implementing cooperative learning at the classroom and school-wide level. It is available from Resources for Teachers, 27134 Paseo Espada, Suite 302, San Juan Capistrano, CA 92675. (800) 933-2667.

- D. Dishon and P. W. O'Leary, *A Guidebook for Cooperative Learning: A Technique for More Effective Schools* (1994). This manual goes step by step through the process of using cooperative learning in the classroom. It has practical lists like rewards to use and social skills to teach, as well as planning and observation forms and dozens of other practical helps. Published by Learning Publications, P. O. Box 1326, Holmes Beach, FL 33509.

- Interaction Book Company offers a catalog of more than 15 cooperative-learning books and videos by Roger and David Johnson. They range from meta-analyses of theory and research to books with prepared lesson plans for various subjects. Contact them at 7208 Cornelius Drive, Edina, MN 55435. (612) 831-9500.

- The Cooperation Company offers a catalog with more than 70 titles of books, games, and teaching aids for cooperative learning, including many of those mentioned above. Jim Roy, principal of Livingstone Junior Academy, founded and runs the Cooperation Company with his family. Contact them at P. O. Box 5971, Salem, OR 97302. (800) 745-5689.

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NOTES AND REFERENCES

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2. Robert E. Slavin, "Cooperative Learning: Applying Contact Theory in Desegregated Schools," *Journal of Social Issues* 41:3 (1985), p. 60.
3. David W. Johnson, et al, "Effects of Cooperative, Competitive, and Individualistic Goal Structures on Achievement: A Meta-analysis," *Psychological Bulletin* 89:1 (January 1981), pp. 47-62.

4. Robert Slavin, "Cooperative Learning and Student Achievement," in *School and Classroom Organization*, Robert E. Slavin, ed. (Hillsdale, N.J.: Erlbaum, 1989).

5. F. M. Newmann and J. Thompson, *Effects of Cooperative Learning on Achievement in Secondary Schools: A Summary of Research* (Madison, Wis.: University of Wisconsin, National Center on Effective Secondary Schools, 1987).

6. Robert E. Slavin, "Research on Cooperative Learning: Consensus and Controversy," *Educational Leadership* 47:4 (December 1989/January 1990), pp. 52-54.

7. Johnson and Johnson.

8. Slavin, December 1989/January 1990, pp. 52-54.

9. All texts are taken from *Holy Bible: New International Version*. Copyright ©1978 by the New York International Bible Society. Used by permission of Zondervan Bible Publishers.