

Institute for Christian Teaching
Education Department of Seventh-day Adventist

**COOPERATIVE LEARNING: SETTING THE STAGE FOR
FAITH AND LEARNING IN THE CLASSROOM**

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Prepared for the
19th International Faith and Learning Seminar
held at
Spicer Memorial College
Pune 411007, India, November 3-15, 1996

**274-96 Institute for Christian Teaching
12501 Old Columbia Pike
Silver Spring, MD 20904 USA**

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Introduction

Many teachers know about it; several practice it. Those who understand and properly use it vouch that nothing else exists like it. Students seem to thrive with it; looks like they enjoy their learning a lot more; it seems to have a therapeutic effect on their self-esteem. School authorities are pleased about its effect on teachers and students. Parents are wondering what in the world is going on which make their children talk a lot more about school. Yes, cooperative learning is making a difference in the schools and classrooms.

To be precise, it is eight years since I have known and practiced cooperative learning. The positive impact of the approach has changed my outlook of life and my teaching profession. In more recent years as a teacher-educator in a Christian college, cooperative learning is one strategy that I never fail to add to my students' repertoire of methods. I believe it is a professional crime if I did not do it! Modelling a cooperative lesson, and seeing student-teachers practice it with gradual fluency and effectiveness in classrooms, are very satisfying experiences for me.

In this essay what I wish to share certain specifics of cooperative learning especially to bring an awareness among educators. I also hope to high-light the faith and learning benefits of this approach in a Christian classroom.

What do we see happening in a typical classroom today? The teacher, of course, is standing in front of the class lecturing, asking questions, or trying to maintain discipline. Most probably students are listening, answering teacher's questions, or engaged in seat-work. This is a typical classroom. Research studies (Goodlad, 1984; Johnson, Johnson, Holubec, & Roy, 1984) have shown that over 85% of instruction in schools go on in this characteristic manner. Teachers teach as they were taught. Classrooms are more teacher-oriented and students are passive learners, vessels to be filled with information.

As schools are becoming larger, instruction is getting more impersonal. Teachers are less accessible due to the larger number of students in each class. Teaching strategies ignore the importance of constructive peer interactions. Extracurricular activities may be the only possibility for any peer interaction, that too within a limited number of students.

But not all classrooms and schools fit into such a description. Educators exist who believe that learning is an exciting and generative process that happens between those who want to learn, including the teacher. Since learning is believed to be a social phenomenon, they ensure that classroom environment is positive. They focus on "we" classrooms, using the philosophy that "we are all involved in this together." Doesn't that sound like cooperative learning?

Yes, cooperative learning is rediscovered! Cooperative learning is not a new idea. Some of the most successful advocates of cooperative learning include

Colonel Francis Parker in the 19th century, and John Dewey in the early 1900's. In India, educators like Ravindranath Tagore and Mahatma Gandhi in the early 1900's had this concept in-built into their educational practices. For example, the "Gurukul" and "Shanti Niketan" ideas of Ravindranath Tagore, where students were taught in a natural atmosphere, incorporated student involvement and cooperation.

Some Biblical Examples of Cooperation

The capacity to work cooperatively has been a major contributor to human survival. God expected his children to work collaboratively in carrying out His plans. Examples of collaboration in projects such as building the ark, constructing the tabernacle in the wilderness, and rebuilding the walls of Jerusalem are but only a few of the many situations given in the scriptures. The schools of the prophets is a classic example of collaboration in a learning situation. Jesus, the Master Teacher used collaboration to train his disciples. For instance, He sent them two by two to go and share the message of love.

Paul has outlined the significance of working together by using the analogy of the body. He says, "For as the body is one, and hath many members, and all the members of that one body, being many, are one body" I Cor. 12:12. He brings the point of cooperation, "And the eye cannot say unto the hand, I have no need of thee: nor again the head to the feet, I have no need of you" (verse 21).

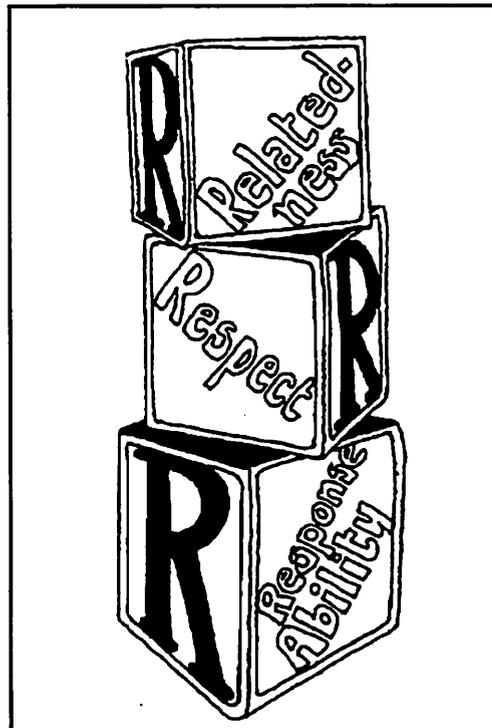
Ellen White recommends cooperative learning in our classrooms. She says, "Cooperation should be the spirit of the schoolroom, the law of its life. . . . Let the older assist the younger, the strong the weak; and, so far as possible, let each be called to do something in which he excels. This will encourage self-respect and a desire to be useful" (1952, pp. 285,6).

The True Basics

Long before the academic basics including the "3R's" can be taught to children, there is another fundamental set of "3R's" that need to be taught. They are the true "basics," the habits of the heart. These are RELATEDNESS, RESPECT AND RESPONSIBILITY.

Children who master these skills and attitudes have a sense of self-esteem. This correlates not only to positive behavior but also to greater achievement in the academic "3R's," "Reading, Riting, and Rithmetic."

To incorporate these basics in a classroom, it is important to set an appropriate classroom climate. The climate of the school or classroom is the atmosphere or feeling that pervades it daily. In the blueprint of



Adventist education given by Ellen White (1923, p. 473) she says, "A Christian influence should pervade our schools."

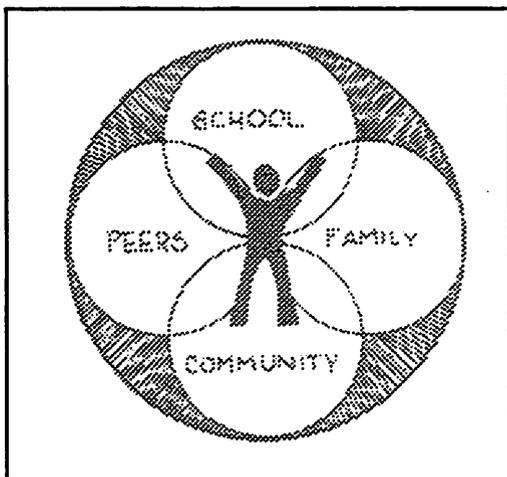
The Value-genesis research conducted in both North American Division and the South Pacific Division yielded information about what makes the difference in a good Adventist school. Among the factors that students identified are potent in the Adventist school they attend is that they see the school environment as warm and accepting (Rice, 1993/94).

From the above discussion it is evident that teachers in Adventist schools not only have the greatest responsibility of integrating faith in learning in their classroom but also that they need to provide an environment conducive for this to happen. How is faith developed?

Faith Development

Faith is developed through relationships. Hill (1996, p. 3) defines

relationship as an "emotional connection which can involve acceptance, intimacy, love, trust, self-revelation, agreement." This involves a personal relationship with God and others. Thus social interaction is a powerful shaper of faith and is the only way through which faith can be developed. The



family, peers, school, and community have a great role in the development of faith of a child.

Teachers have the opportunity to facilitate social interactions which could result in faith development. But to understand how this is done in a classroom we need to see the options that teachers have in classroom room structuring.

The Three Classroom Structures

Focusing particularly on the classroom interactional patterns, let us look at the types of environment or structures that teachers create in their classrooms. Teachers can arrange their classroom

- * *competitively* so that students work to achieve a goal that only one or a few students can attain;
- * *individualistically* so that students work independently on their own learning goals at their own pace to achieve a preset criterion for success; and
- * *cooperatively* so that students work collaboratively in small groups, making sure that all members accomplish the goals.



Out of these three classroom structures, the cooperative learning structure stands in contrast to the other two structures. It has the potential to lend itself as a framework for integrating faith and learning in the hands of an effective teacher. This classroom structure could enhance creating an environment of warmth and acceptance.

For the past half century the competitive and individualistic goal structures have dominated most of our education. An extensive and inappropriate overuse of competitive and individualistic instructional methods in schools probably is the cause of many difficulties students encounter outside of school. Besides that such practices do not adequately prepare students for the kinds of cooperative efforts that will be expected of them in their future work and home lives. It is imperative that we structure our school life in ways that are congruent with the future lives of our students.

This is not to say that teachers must do away with individualistic and competitive structures in their classroom. These have their benefits, when used judiciously. They need not be the dominating classroom structures.

Cooperative Learning: A Description

The concept of cooperative learning might sound simple. But cooperative learning is not having students sit side-by-side at the same table to talk with each other as they do their individual assignments. It is not having students do a task

with instructions that those who finish first are to help the slower students. Cooperative learning is not assigning a report



to a group of students wherein one student does all the work and the others put their names on the product, as well (Johnson, Johnson, Holubec, & Roy, 1984).

What is cooperative learning then? Cooperative learning refers to a variety of methods for organizing classroom instruction so that students work and learn in small groups of two to five students. Five basic elements of cooperative learning make it what it is. They are:

Positive Interdependence

Goals are structured so that students need to be concerned about performance of all group members as well as their own. This may be achieved through mutual goals, divisions of labor, dividing materials or information among group members, assigning students differing roles and by giving joint rewards. All individuals must succeed for the group to succeed.

Individual Accountability.

Every student needs to master the assigned material and is responsible to demonstrate accomplishment of the learning. Each student is given feedback on his or her progress and the group is given feedback on how each member is progressing so that the members can help and encourage each other.

Group Processing

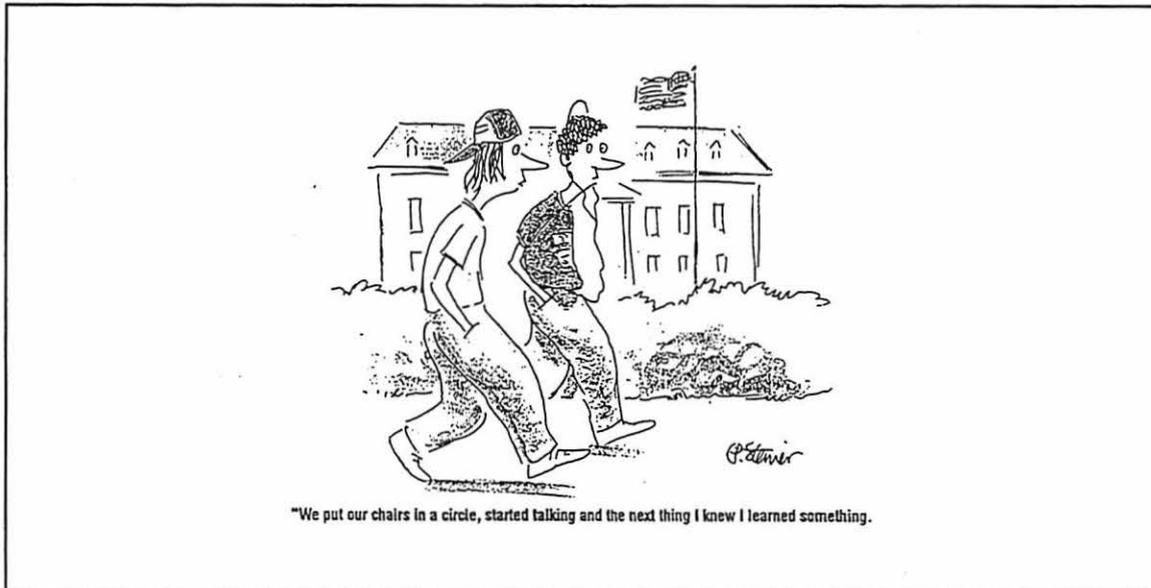
Students are given time and procedures for analyzing how their learning groups are functioning. It is not only the content that needs to be mastered but also the social skills that help all group members to maintain effective working relationship within the group. Group members assess their collaborative efforts and target improvements.

Social Skills

Students are deliberately taught human interaction skills that enable groups to function effectively, for example, taking turns, encouraging, listening, leadership, ability to communicate, to trust one another, and to manage conflict. They are also motivated to use these skills. Specific strategies exist for teaching social skills along with the content.

Face to Face Interaction

Students work together in close proximity and dialogue with each other in ways that promote continued progress.



Faith Benefits of Cooperative Learning

From looking at these five essential attributes of cooperative learning, it is evident that they illustrate the outworking of numerous Christian values which lie at the heart of faith formation. Interdependence focuses on a concern for others which is another way of expressing love. Accountability is a demonstration of our responsibility for each other's welfare. Collaboration gives the ability to work closely with others, seeing their point of view. Listening, encouraging and trusting are essential elements of affirmation and support which help comprise faith. Face

to face interaction promotes the type of closeness required for formation of caring community. Table 1 summarizes the connections.

Table 1

Connection between Cooperative Learning
and Faith Formation

Attribute of Cooperative Learning	Benefit in Faith Formation
Positive Interdependence	Concern, Love
Individual Accountability	Responsibility for others' welfare
Group Processing	Seeing others' perspective
Social Skills	Affirmation and support
Face to Face Interaction	Closeness

Other Benefits of Cooperative Learning

In recent times several groups of researchers and practitioners have been connected with cooperative learning. David Johnson, Roger Johnson, Robert Slavin, Elliot Aronson, Shlomo Sharan, and Spencer Kagan are a few names of these. The research studies on cooperative learning are overwhelmingly positive. The following are the main benefits identified by the extensive studies (Johnson, Johnson, & Holubec, 1988).

- ☞ *Higher achievement and increased retention*
- ☞ *Greater use of higher level reasoning strategies and increased critical reasoning competencies.*
- ☞ *Greater ability to view situations from others' perspectives.*
- ☞ *Higher achievement and greater intrinsic motivation.*
- ☞ *More positive attitudes toward subject areas, learning, and school.*
- ☞ *More positive attitudes toward teachers, principals and other school personnel.*
- ☞ *Higher self-esteem based on basic self-acceptance.*
- ☞ *Less disruptive and more on-task behavior.*
- ☞ *Greater collaborative skills and attitudes necessary for working effectively with others.*
- ☞ *More positive psychological adjustment and health.*

The student achievement suggested by these benefits can, in the hands of the Christian teacher, build the identify of faith from a Christian perspective, I believe strongly that cooperative learning has the potential to transform classrooms, schools, and ultimately society, by creating communities of caring and support.

Working together, communicating, sharing, finding common goals and the common ground--these are central values for Christian educators and ones that we believe can be realized in classrooms through cooperative learning.

Dimensions of Learning and Cooperative Learning

Cooperative learning is implicitly in the Dimensions of Learning model, a model which develops student thinking ability. The Dimensions of Learning is an instructional program that grew out of the comprehensive research- and theory-based framework on cognition and learning. Teachers have the responsibility not only to teach the content but also to teach how to learn. Five dimensions of learning are identified:

1. Positive attitudes and perceptions about learning
2. Acquiring and integrating knowledge
3. Extending and refining knowledge
4. Using knowledge meaningfully
5. Productive habits of mind

All the dimensions are enhanced through cooperative learning but dimension four is even more affected by it. The meaningful use of knowledge through decision making, investigation, inquiry, problem solving and invention are probably done more efficiently by a cooperative group than by an individual (Marzano, 1992).

These dimensions, assisted by cooperation, focus on one of the primary goals of Adventist education--the development of the power of intellect. Extensive research studies (Slavin, 1989/90) have shown that cooperative learning has a positive effect on student achievement.

Cooperative Learning Strategies

One objective of this essay is to help teacher implement cooperative learning. With this in mind, a repertoire of cooperative learning strategies will be listed here. The common theme in all of these are:

- ✓ The class is divided into small groups (typically with two to five members each), who work together cooperatively to discuss and complete an academic task.
- ✓ Tasks can be given at various levels of intellectual complexity: facts, skills, concepts, principles, problem solving, and creative thinking. A teacher presentation may or may not precede the group activities.
- ✓ The teacher states guidelines to foster cooperation and mutual interdependence within each group, circulating from group to group and noting progress and problems for later processing.

Scores of cooperative learning strategies exist. Now that the basic principles of cooperative learning are described, let us look at a few strategies which are

popular and easy to use. It is easy for a teacher to see that each strategy has its own unique purpose and goal.

Turn to Your Neighbor or Think-Pair-Share

First each student is given time to think about the problem posed by the teacher. Students then pair up to discuss the idea, to write or to draw as instructed by the teacher. During Share time, students are called upon to share the answer with the class as a whole.

In a high school or college situation, this strategy can be called the "three minute pause". After a lecture of say, 10 or 15 minutes, the teacher asks the students to turn to their neighbors and summarize the points learned. This helps recapitulate the important points as well as avoids the monotony of a lecture.

Pairs of Pairs

Students write out a list of responses to a question or statement. They first work in pairs and make one list. Two pairs then get together and make a single combined list. All the members of the groups are responsible to know what is on the list.

Numbered Heads Together

The teacher has students numbered off within groups, so that each student has a number: 1, 2, 3, 4, or 5. The teacher asks a question. Students "put their

heads together" to make sure that everyone on the team knows the answer. The teacher calls a number (1, 2, 3, 4, or 5) and students with that number can raise their hand to respond.

Inside-Outside Circle

Students stand in pairs in two concentric circles. The inside circle faces out; the outside circle faces in. Students respond to teacher questions as they rotate within the same circle to face a new partner.

Jigsaw

The teacher cuts the teaching material into four or five meaningful parts and gives to the members of the base group. Each group member is given a different part and is responsible for learning it and then teaching it to his or her groupmates. For helping to do this, the members from each team having the same material meet together to learn their material. This group is the expert group. They come back to their base group to teach other members. Each individual in the group is responsible for the whole material. The teacher may give a quiz and the group is awarded for their performance.

Co-Op

All students are given a pretest on any memory items such as vocabulary words, math facts, geography terms. Have each student make a set of flash cards on the words or problems he or she missed on the pretest. (Regular paper that is cut would do.) In pairs they tutor each other. The tutees will hand over the cards so that the tutors can show and teach. Praises are given liberally for a correct answer and the card is "won back" to the tutee. The tutor and tutee switch roles.

The T-Chart

This strategy is especially useful for teaching a social skill. The teacher writes the name of the skill to be learned and practised and draws a large T underneath. The title on the left

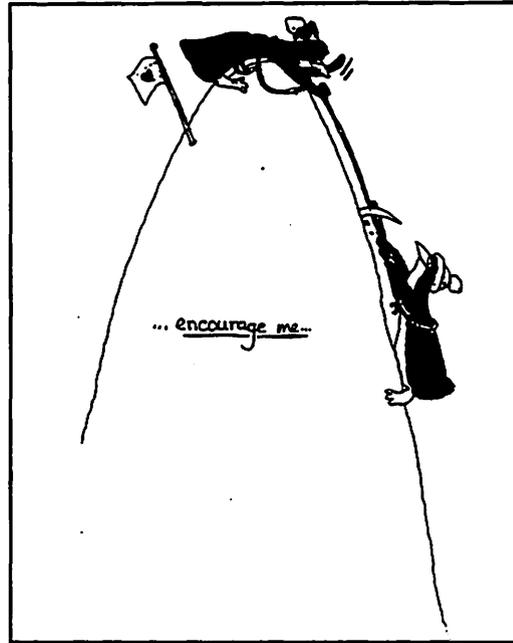
side of the T is "Looks Like" and the one on the right side of the T "Sounds Like." Write down a number of behaviors that operationalize the skill on the left.

On the right side write a number

of phrases that operationalize the skill. Have all students practice "Looks Like" and "Sounds Like." Let's look at an example. For teaching the social skill "Encouragement" the T-chart may look like this.

Encouraging	
<i>Looks Like</i>	<i>Sounds Like</i>
<i>Thumbs Up</i> <i>Pat On The Back</i> <i>Shake Hands</i>	<i>"What Is Your Idea?"</i> <i>"I had not thought of that"</i> <i>"Good Idea!"</i> <i>"That Helps"</i> <i>"That's Interesting"</i>

Inherent within each human being is the need to be loved and encouraged. By giving, we receive. Classroom become places where such giving and taking goes on. It is obvious that the T-chart cooperative strategy is a powerful means of developing and using Christian values among the students.



Teams-Games Tournament

The base group revises the lesson together. The teacher forms tournament teams of 3 to 4 members from different base groups. Each of these tournament teams is assigned a table and is provided one set of question and answer sheets, number cards (corresponding to the number of questions), and a score sheet. Each member takes turn in picking the number cards and answering the corresponding question from the question sheet. The answer is verified from the answer sheet by the other members. Points are won for each correct answer. The teams may go through more than one round of the tournament and win more points. After a designated time, the tournament stops. The teacher tallies all the group scores and the groups are rewarded for their achievement.

Evaluation

How does one go about evaluating the performance of the learners? This is a typical questions that teachers ask. In an ideal classroom, each student must get a number of grades resulting from collaborative efforts and individualistic efforts as well as competitive efforts. Use a criterion-referenced evaluation system in determining final grades. Many ways of working out the grade is identified. For example, in a dual-grading system, students work together in cooperative learning groups, prepare each other for the test, and take the test and get an individual grade. Then a second grade based on the total performance of all group members may be added along.

Difficulties in Implementing

Implementing cooperative learning may not be as simple as it sounds. Students are not born with cooperative ability (nor are they born with competitive ability, for that matter). It takes time to transform classrooms into places when students learn to care about each other's learning. Grouping the students into productive groups and monitoring social skills of students are not easy to do. This includes the physical arrangement as well as working on the mind-set of the students. Usually the older the learners, the greater the resistance to the new method.

One of the most difficult things to tackle is the initial reactions of parents. Parents of high achievers especially tend to think that their children are penalized by

working with others. Studies have found that high-achievers continue to do well or better in cooperative learning.

As always, good things take time to happen. Cooperative learning is no exception. But it is worth the try!

My Observations

My classroom observations on the use of cooperative learning has shown that cooperative learning is an alternative to the traditional whole-class instruction. The method can be applied with all age levels of students, and for any subject areas.

Students become a community of learners, actively working to enhance each person's knowledge, proficiency, and enjoyment. It also has an enlivening and invigorating effect in the professional lives of the teachers. With young learners, it is amazing to see that in groups they handle challenging situations that are much beyond the capabilities of an individual student at that developmental stage of life. Teachers have felt more confident about their teaching and I can vouch that from my own experience. Comments like "My classes are more fun to teach," "I find it so much easier to manage my class," are more frequently made by teachers.

Conclusion

In conclusion, this essay has argued that cooperative learning is a teaching strategy that can effectively set the environment for faith to be developed. This is because much faith is taught in the closeness, the commitment and the give-and-take of human relationships. This strategy does bring about improved academic learning in the class by helping students reach higher level of thinking which is also an important aspect of their spiritual development.

References

- Gibbs, J. (1987). Tribes: A process for social development and cooperative learning. Santa Rose, CA: Center Source Publications.
- Goodlad, J. I. (1984). A place called school: Prospects for the future. New York: McGraw-Hill.
- Hill, B. (1996). Faith. An unpublished paper.
- Johnson, D.W., Johnson, R.T., & Holubec, E. J. (1988) Cooperation in the classroom. Edina: Interaction Book Company.
- Johnson, D.W., Johnson, R.T., Holubec, E. J., & Roy, P. (1984). Circles of learning: Cooperation in the classroom. Alexandria, VA: Association for Supervision and Curriculum Development.
- Marzano, R. J. (1992). Ad different kind of classroom: Teaching with dimensions of learning. Alexandria, VA: Association for Supervision and Curriculum Development.
- Rice, G.T. (1993/94). Good Adventist schools: Making a difference. Journal of Adventist Education, 56(2), 15-20.
- Slavin, R. E. (1989/90). Research on cooperative learning: Consensus and controversy. Educational Leadership, 47(4) 52-54.
- White, E.G. (1923). Fundamentals of Christian education. Nashville, Southern Publishing Association.
- White, E.G. (1952). Education. Boise: Pacific Press Publishing Association.