
1. Elizabeth Cohen, “Elements of Successful Cooperative Learning”

Dedicated teachers are always looking for better ideas to meet the many challenges they face in school, especially as diversity increases in the student population. Cooperative learning methods provide teachers with effective ways to respond to diverse students by promoting academic achievement and cross-cultural understanding.

Teachers are not alone in coping with the culture shock they may feel as they recognize the diversity among their students. Students themselves may lack confidence in responding to students from diverse backgrounds. Immigrant students, thrust into U.S. classrooms for the first time, and native English speakers, unable to communicate with newcomers in their school and unaware of how to respond to the differences they see, can become alienated from one another. Students and teachers need strategies to help turn diversity into a positive force for developing themselves as individuals, as well as supporting the growth of others. Cooperative learning is a powerful educational approach for helping all students attain content standards and develop the interpersonal skills needed for succeeding in a multicultural world.

Key Elements of Successful Cooperative Learning

Cooperative learning takes many forms and definitions, but most cooperative approaches involve small, heterogeneous teams, usually of four or five members, working together towards a group task in which each member is individually accountable for part of an outcome that cannot be completed unless the members work together; in other words, the group members are positively interdependent. A vivid example of interdependence can be found in the relationship between language-minority and language-majority students in two-way immersion programs. Native and non-native English speakers work together to become bilingual.

Positive interdependence is critical to the success of the cooperative group, because the dynamic of interconnectedness helps students learn to give and take--to realize that in the group, as well as in much of life, each of us can do something, but none of us can do everything. When cooperation is successful, synergy is released, and the whole becomes greater than the sum of its parts. For cooperative groups to be effective, members should engage in teambuilding activities and other tasks that deal explicitly with the development of social skills needed for effective teamwork. Members should also engage in group processing activities in which they discuss the interpersonal skills that influence their effectiveness in working together. When full cooperative learning structures are implemented, the benefits in student achievement often can be astounding (Williams, 2007).

Interdependence

The essence of the cooperative group is the development and maintenance of positive interdependence among team members. A sense of interconnectedness can help students transcend the gender, racial, cultural, linguistic, and other differences they may sense among themselves. These differences often are at the root of prejudice and other interpersonal stress that students experience in school.

Students need access to activities in which they learn to depend on each other as they ask for and receive help from one another. Individualistic and competitive teaching methods certainly have their place in the instructional program, but they should be balanced with cooperative learning (Johnson and Johnson, 1994).

When students work in cooperative teams in which "all work for one" and "one works for all," team members receive the emotional and academic support that helps them persevere against the many obstacles they face in school. As cooperative norms are established, students are positively linked to others in the class who will help them and depend on them for completing shared tasks. By becoming knowers as well as learners in a supportive atmosphere, English learners can establish more equal-status relationships with their peers.

When the environment becomes more equitable, students are better able to participate based on their actual, rather than their perceived knowledge and abilities. Teamwork, fostered by positive interdependence among the members, helps students learn valuable interpersonal skills that will benefit them socially and vocationally.

Interaction

Academic and language learning requires that students have opportunities to comprehend what they hear and read as well as express themselves in meaningful tasks (McGroarty, 1993). Cooperative learning creates natural, interactive contexts in which students have authentic reasons for listening to one another, asking questions, clarifying issues, and re-stating points of view.

Cooperative groups increase opportunities for students to produce and comprehend language and to obtain modeling and feedback from their peers. Much of the value of cooperative learning lies in the way that teamwork encourages students to engage in such high-level thinking skills as analyzing, explaining, synthesizing, and elaborating.

Interactive tasks also naturally stimulate and develop the students' cognitive, linguistic, and social abilities. Cooperative activities integrate the acquisition of these skills and create powerful learning opportunities. Such interactive experiences are particularly valuable for students who are learning English as a second language, who face simultaneously the challenges of language acquisition, academic learning, and social adaptation. By stimulating language input and output, cooperative strategies provide English learners with natural settings in which they can derive and express meaning from academic content (McGroarty, 1993, and Swain, 1985).

Students do not know instinctively how to interact effectively with others. Social skills, like other skills, should be taught and reinforced. Teambuilding activities will help students get to know and trust one another. Other important social skills include accepting and supporting one another and resolving conflicts constructively. Teachers need to model positive interpersonal skills, have students practice the skills, and encourage the students to process how effectively they are performing the skills. Focusing on social skill development will increase student achievement and enhance the students' employability, interpersonal relationships, and general psychological health (Johnson and Johnson, 1990).

Cooperative methods are flexible and can be adapted for students with special needs. In diverse language settings, differences in students' English language proficiencies make it necessary for teachers to modify the methods to ensure that English learners can participate fully with fellow team members. For example, teachers may ask one member of each team to be a bilingual facilitator who helps students work together. In addition, activities that focus on social skill development and teambuilding should be used frequently to facilitate cross-cultural communication and understanding among team members.

Teachers will also want to consider which language--English or the native language or both--should be used by team members to accomplish language, content, and cross-cultural goals. Frequent use of group processing activities will help teachers and team members identify and solve problems on the team that may be rooted in cultural or linguistic differences.

Achievement

Cooperative learning represents a valuable strategy for helping students attain high academic standards (Kagan, 1993; Cohen, 1994). After nearly fifty years of research and scores of studies, there is strong agreement among researchers that cooperative methods can and usually do have positive effects on student achievement. However, achievement effects are not seen for all forms of cooperative learning; the effects depend on the implementation of cooperative learning methods that are characterized by at least two essential elements: positive interdependence and individual accountability (Slavin, 1990).

In areas other than achievement, there is even broader consensus about the effects of cooperative learning. For example, when students of different racial or ethnic backgrounds work together toward a common goal, they gain in liking and respect for one another. Cooperative learning also improves social acceptance of mainstreamed students with learning disabilities (Slavin, 1990).

Professional Development

Because groupwork dramatically changes the teacher's role, professional development is vital to the implementation of cooperative learning (Cohen, 1994). To learn and employ cooperative strategies, teachers need access to extensive professional development that includes (1) the theory and philosophy of cooperative learning; (2) demonstrations of cooperative methods; and (3) ongoing coaching and collegial support at the classroom level. Implementing cooperative approaches is greatly enhanced when teachers' have opportunities to work together and learn from one other. As teachers observe and coach each other, they provide essential support to ensure that they continue to acquire the methods and develop new strategies tailored to their own situations.

Although cooperative learning is widely endorsed as a pedagogical practice that promotes learning and socialization among students, teachers still struggle with how to introduce it into their classrooms (Gillies, 2007). Teachers must use strategies that challenge student thinking and scaffold their learning. Within the context of the No Child Left Behind Act of 2001 and a climate of high stakes testing, cooperative learning can enhance student outcomes when teachers promote student engagement and learning across various levels and for students of diverse abilities.

Conclusion

Cooperative learning methods hold great promise for accelerating students' attainment of high academic standards and the development of the knowledge and abilities necessary for thriving in a multicultural world. However, like other innovations, cooperative learning approaches need to be tailored to the cultural and linguistic context in which they are used. Designed and implemented by teachers who are loyal to the key elements of cooperative learning and dedicated to regarding diversity as a resource, cooperative approaches can create supportive environments that enable students to succeed academically, enhance their employability, and improve their interpersonal relationships.

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2. Susan Ledlow, “Cooperative Learning in Higher Education”

Cooperative learning is more than simply asking students to get in a group and work on an assignment together. Most researchers and practitioners of cooperative learning stress that it is a formal instructional model in which teachers carefully design lessons and activities that are suitable for use by teams. These teams are small, stable, and heterogeneous, and have been adequately prepared for working together. There are many models of cooperative learning. I started with Spencer Kagan’s Structural Approach (1992), but have adapted his ideas somewhat to make them more relevant to a university classroom. I also borrow liberally from the work of Karl Smith, Neil Davidson, & Barbara Millis. When using teams in the classroom, I see faculty as having to direct their attention to six different areas: climate-setting; team formation; teambuilding; cooperative skills development; lesson design; and classroom management.

Climate Setting

While many of my students are enthused about the opportunity to learn with and from their peers, it is not uncommon for me to encounter students who are reluctant to participate in any sort of group activities. So, how does one take a class of students whose feelings about cooperative learning range from love through indifference to downright hostility and turn them into a community of learners? The first (but by no means the only) step is to work on creating a class climate that encourages cooperation. My suggestions include:

- Communicate clear expectations to students about CL on the first day of class. I recommend that you inform students that you plan to use cooperative learning, why you use it, and what it means to them. Will they be graded on class participation? What happens if they come to class unprepared? It’s particularly important to let students know about your policies on group grades. It’s also a good idea to acknowledge that some people would prefer to work alone, and to point out the activities and assignments they’ll be working on independently.
- Provide a non-threatening, hands-on, introduction to cooperative learning that students can easily accomplish. Rather than telling students that cooperation makes learning fun, demonstrate it. Put students into teams and have them do a simple, well structured cooperative activity. The activity could introduce your course, cooperative learning, or your content.
- Personalize the learning environment. People in a learning community know and use each other’s first names. Name tags or tents work well in large classes. In smaller classes (up to 50 students), try the Name Game, developed by Jim Luotto and Edwina Stoll (Department of Communication, DeAnza College): moving clockwise, each student says his or her first name, the names of all students who came before him, and then his/her first name again.

Team Formation

There are many different approaches to forming teams in a classroom. Teams might be self-selected, formed randomly or formed by the instructor. They might be large or small. Most CL teachers can agree on the following principles.

- Teams in cooperative learning classrooms are formed by the teacher, rather than self selected. Self-selected teams may be composed of groups of students who all have similar skills and are lacking the requisite skills to complete particular tasks or assignments. They may be composed of groups of friends who share similar opinions, when it might benefit them to work with students whose ideas are different from their own.
- Teams are heterogeneous on the basis of achievement, skills, ethnicity, gender, or experience. There are many classes in which teams should be heterogeneous by academic performance, but often, the type of heterogeneity you desire depends on your content. If teaching a business class, you might consider pairing students who have real business experience with those who have limited work experience. In a development psychology class, you might want to mix those who have children, or who have experience working with children, with those who have no such experiences. If there is a significant amount of writing in your class, you might consider assessing writing skills as a basis to form the team. If students will need to use a particular piece of software, you might try to make sure that at least one person on each team is familiar with it.
- Teams are small, composed of no more than five members. It's easy to hide in a team of eight, but if you're in a group of two and don't participate, it's noticeable. I really like to use fours. I can have them occasionally work in pairs to double the amount of participation.
- Teams are stable (they change no more than twice during the semester). It takes all of us time to get comfortable and efficient working with a new group of people. If you switch teams frequently, students never have time to get to the "performing" stage of group development. Some faculty prefer to keep teams together all semester. I usually have two to three sets of teams each semester.

Teambuilding

Teambuilding may be defined as "the process needed to create, maintain, and enrich the development of a group of people into a cohesive unit" (Solomon, Davidson, & Solomon, 1993). Teambuilding exercises are very important in the development of teams that will work together for an extended period of time on a complex project or a series of activities. These exercises should revolve around four needs:

- The first step of teambuilding is simply getting acquainted and becoming socially cohesive. Team building exercises that have a component of fun or play are useful in allowing social cohesiveness to develop. Examples include: designing a team logo, sharing information about first jobs, or participating in activities to discover characteristics that team members have in common.
- Teams need to develop roles and norms. An example of a teambuilder which would help teammates to develop effective norms would be to ask them to develop team groundrules or a "Code of Cooperation." A teambuilder which would help teammates use roles effectively might ask them to select the roles which are most needed to accomplish the task at hand and to assign those roles to team members.
- Effective interpersonal communication is vital to the smooth functioning of any task group. Norms will develop governing communication - do those norms encourage everyone to participate, or do they allow one or two dominant members to claim all the "air time?" Team building exercises can focus on skill development, communication network design, and norms, but even when the exercise is focused on another issue, communication is happening. Active listening

exercises, practice in giving and receiving feedback, and practice in checking for comprehension of verbal messages are all aimed at developing skills.

- Teams need to be able to process or reflect on how well they are working together. Teaching team members to give and receive constructive feedback (both positive and negative), and allowing them time in class to do so helps to focus their attention on their interdependence.

Cooperative Skills Development

Cooperative skills development is one of the concepts that distinguish cooperative learning from traditional group work. There are a number of approaches for helping students develop these skills. Most faculty rely more heavily on one or two of these strategies.

- You may choose to directly teach cooperative skills. One approach is that of David and Roger Johnson and Karl Smith, who use a T-Chart to have students brainstorm the non-verbal and verbal components of a particular social skill. For example, students are asked, “What does active listening look like? What does it sound like?” Their answers are recorded and posted in the classroom as a reminder to use the targeted skill when working together on team tasks.
- For some tasks, it is useful to assign roles and gambits. For example, let’s say that I notice that many teams in my class are not finishing on time, that in several groups one person is dominating, and that some of the teams have turned in very superficial reports. A good leader would keep the team on task, check the quality of the report, and make sure everyone participates. Rather than having one person try to oversee all of these functions, I will distribute them among the team members. I’ll use a Taskmaster and a Recorder to enhance task performance and a Gatekeeper (someone who opens and closes the gate of communication to ensure that students participate equally) and Encourager to help the group function smoothly. I’ll also give them some gambits (helpful verbal and nonverbal cues) to go along with their role. For a different kind of assignment, I might use different roles (e. g., materials monitor, devil’s advocate, coach, etc.).
- The structure of the task itself may foster certain skills or address certain team problems. For example, if you find that students have a tendency to only listen to one or two team members’ ideas when solving a problem you might use the structure Formulate-Share-Listen-Create by Johnson, Johnson, and Smith. In this structure students must each formulate an answer individually, listen to all answers and then create a new answer that incorporates the best of all the ideas. Obviously, it also promotes active listening.
- Monitor teams and reinforce good skills. As a part of the monitoring process, you might point out teams that are successfully using a particular cooperative skill. This helps to reinforce the skill for the whole class as well as that particular team. You may also take notes on team interactions and present them to the team in confidence.

Lesson Design

Well designed CL lessons and assignments give students a specific task, such as solving a problem, creating a model, or comparing and contrasting. To a certain extent, they also provide a set of instructions that describe how students should work together. There are a number of considerations in developing lessons and assignments.

- You might consider using or adapting a pre-existing structure or procedure like Jigsaw, Academic Controversy, Think-Pair-Share, or Formulate- Share-Listen-Create. In choosing a structure, consider whether you want one answer or multiple answers from the team, what form or product you expect their work to take, and how skilled or experienced they are at working together.
- If you cannot find a pre-existing structure that you can use or adapt, create your own. Decide upon your academic and cooperative skills objectives. Then rough out a series of steps that you can have students go through to accomplish the task. Check to see if you have incorporated the basic

principles of cooperative lesson design (see below). Then write a series of instructions to your students explaining how they should accomplish the task.

- It's not cooperative learning if the **lesson design** does not include the following four principles:
 - Positive interdependence**-- the success of all in the team is linked through goals, materials, or rewards. Students are aware that "we sink or swim together."
 - Individual accountability** –at various points in the process, the instructor can verify that all students are contributing and learning. Often this is accomplished through individual public performance (randomly calling on one student in the team) or requiring individual assignments as part of the team assignment.
 - Equal participation**—the structure of the assignment should be such that all students have to participate, and that there are mechanisms to ensure that the participation is fairly equitable. You may try assigning roles, adding steps to the lesson that require input from all team members, or establishing turn-taking procedures.
 - Simultaneous interaction** – at several points in the lesson, you should ensure that at least more than one student is actively engaged at a time. Adding a step where students work with a partner within the team doubles the amount of participation. Having all students write an individual response before engaging in a team discussion gets all simultaneously involved.

Classroom Management

A cooperative learning classroom means that your management strategies will be different. In addition to paying attention to organizing your Powerpoint slides and lecture notes, you have to think about preparation that will ensure that small groups will be able to work relatively independently while staying on task and getting along.

- Before teaching a class that relies heavily on cooperative learning, it's often useful to assign homework or prepare a quiz to ensure preparation. If you have a well-designed activity that relies upon students having already read an article or chapter, it can be a complete waste of everyone's time if they haven't.
- Planning ahead and preparing materials and agendas for your teams really pays off. Give instructions in writing, and clearly specify the academic objectives for the assignment. Using graphic organizers, like T-Charts or Venn Diagrams also helps teams to organize their work.
- Frequently I specify the social skills needed to complete the assignment successfully. Sometimes I simply remind students to make sure that everyone contributes. Other times I help them brainstorm components of complicated skills like giving constructive feedback.
- During teamwork, monitor the teams. I intervene when teams get off track or stuck. I don't want them to be unable to complete an assignment because they misunderstood directions or got off on the wrong foot. I also don't want them getting off task. Sitting down next to a team reminds members to stop talking about the latest movie or last weekend's basketball game.
- After teamwork, it's very important to debrief the assignment. You want to check randomly with groups to see that they "got it." Good ideas can be shared from the team to whole class, and misunderstandings can be corrected before students go home to study or work on individual assignments.

Conclusion

Successful cooperative learning requires balancing all of these areas, while still covering content (and publishing, and writing grants, and serving on committees). Consider, but don't obsess over them, when planning. Revisit them after you develop a new lesson or activity to help you reflect on what works well or not so well for your teaching style, your students and your content.

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