Cooperative learning is most often defined as the instructional use of small-group activities to maximize individual and group learning. The idea is to reduce competition or individualistic experiences by creating supportive and safe group learning experiences. The academic outcomes of cooperative learning include increased academic achievement, productivity, and greater critical thinking competency (Johnson, Johnson, & Holubec, 1993). Cooperation has also been found to promote more risk-taking behavior in students (Bruffee, 1999). Moreover, group learning may also increase students’ academic outcomes (King & Kitchener, 1994), goal commitment and positive attitudes toward the subject matter (Johnson et al., 1993). Cooperative and collaborative learning have both been linked to higher levels of retention in courses and in college overall, and the benefits may be even greater for high-risk students (Slavin, 1995). Group learning has also been associated with greater social and personal development (e.g., self-esteem) (Johnson et al., 1993; Slavin, 1995) and increases in degree aspiration, grade point average, self-esteem, problem-solving skills, and overall academic development.

Challenges of Cooperative Learning

Although there are many benefits to implementing cooperative learning, there are costs to implementation. First, there is higher student accountability. Students are expected to move from the position of passive recipients of knowledge to being active contributors within the group. Students need to prepare more in order to participate in class at a higher level, they must actively discuss and contribute to problem solving, develop a presence in class, respond to group needs, reduce competition, and change their own perceptions about the teacher and texts as the authorities and sources of knowledge (MacGregor, 1990). This new accountability may be met with some resistance when cooperative learning is implemented, but it is important for the instructor to hold students to this higher level of accountability.

When cooperative learning is implemented, the role of the instructor also changes. The instructor must now adopt a facilitator role (3.2.1 Overview of Facilitation). He or she must conduct continual assessments of individuals and groups. Thus, the instructor must be comfortable providing these types of assessments. It can be costly at first to plan and structure an activity, particularly to ensure that the activity will fit within class time limits. Once an activity is planned and used for the first time, this time constraint diminishes. However, an activity may need to be adjusted before it is reused.

Key Attributes of a Cooperative Learning Classroom

Since the purpose of cooperative learning groups is to make each member a stronger individual in his or her own right, the instructor should create a pattern to classroom learning in which students learn in a cooperative group, individually demonstrate their learning, and debrief the learning in their cooperative group. For examples of group-individual-group applications, see Cooperation in the Classroom and The Nuts and Bolts of Cooperative Learning. When cooperative learning is successful, the dynamic in the classroom will be different from that of the traditional classroom. The following listing describes key attributes of a class in which cooperative learning has been incorporated.

- Greater shared authority

When cooperative learning is incorporated into the classroom, the students are more responsible for the mastery of content and are more active in the learning process. They are expected to present information, engage in dialogue, and share their insights with their peers. This allows the teacher to step out of the role of “expert on all” and “enforcer” to be facilitator of learning settings. This approach requires direct teaching when it is needed, individual work when it is most appropriate, and lots of cooperative work to keep the classroom active and friendly (Johnson,
Students who participate in cooperative learning environments are positively interdependent; they perceive that they are responsible both for their own learning and for the learning of others in the group. This climate can be fostered through shared goals, rewards, resources, and role interdependence (Johnson et al., 1993).

- **Increased interaction that encourages others to learn and achieve**
  This process involves interaction among students that ranges from sharing resources, to challenging each other, to acting in trusting ways. Often, communication patterns in the classroom pivot around the instructor. Information goes from student to instructor and then back to the students. For cooperative learning to occur, communication and interaction must also take place directly between the students (Johnson et al., 1993; Slavin, 1995).

- **Individual and group accountability**
  Students are assessed individually and are also held responsible to the group for their participation. Effective cooperative practices place a level of responsibility on the individuals and on the groups. The students are responsible for each others’ success and learning to some degree and should hold peers accountable for that responsibility (Johnson et al., 1993; Slavin, 1995).

- **Increased development of student and faculty interpersonal skills**
  Cooperative learning has been related to greater development of interpersonal skills and, in reverse, those same skills enable greater collaboration. Examples of these skills include articulating ideas, listening to others, managing conflict, leading and contributing to group dynamics, and appreciating and interacting with individuals from diverse perspectives and backgrounds (Slavin, 1995).

- **Creation of a positive group dynamic and culture**
  It is important to create and convey standards for group behavior and tone that include respect for people and ideas, the open exchange of ideas that allows everyone to participate, support for risk-taking in which individuals step outside of their personal or intellectual comfort zones, and encouragement for one another (Johnson et al., 1993).

### Incorporating Cooperative Learning in a Course

The first step in using cooperative learning is to assess the curricula over the course of the semester and look for opportunities which lend themselves well to using student groups. Next, faculty members identify particular objectives, topics, or assignments that could be addressed collaboratively. The opportunity for group work may exist within a single class meeting, during a unit of the course, or throughout the entire term.

#### Steps for Implementing a Cooperative Learning Activity

1. Provide background information and content that is necessary for discussing the activity.
2. Form groups in meaningful ways and identify physical space for each group.
3. Present the activity.
4. Determine group roles.
5. Facilitate during and after the activity.
6. Process the experience with the students.

**Step 1—Provide background information and content that is necessary for discussing the activity.**

Depending on the activity, it may be necessary to have preliminary assignments that will prepare students for the cooperative learning experience. These assignments may be extensive or as simple as a presentation of particular material before the activity begins.

**Step 2—Form groups in meaningful ways and identify physical space for each group.**

Depending on the activity, the groups that are created may be critical to the activity’s success. It is important to consider the characteristics of students that impact group dynamics, such as educational level, experience, gender, and majors. Faculty may want to have students complete an information sheet at the beginning of the semester that asks about their education, major, and experiences to assist in the proper formation of groups. Furthermore, the physical space necessary for the activity should also be taken into consideration. Again, depending on the activity, each group should be allotted space within the classroom or wherever the activity will be conducted.
3.3.2 Cooperative Learning

Step 3—Present the activity.

When presenting the activity to the class, certain key items must be included. First, state the general purpose of the activity. Next, for reference, provide directions on paper to the group or on the board. Give a time frame for the activity. It is also essential to set the tone for the activity, even if the students groan when they hear the word “groups.” Finally, ask if there are any questions before the activity begins. Before the group work begins, faculty may also want to allow individuals some time to read and/or reflect on their responses, roles, or insights. This preparation period gives students with varying comfort levels a chance to engage with the material and with their roles.

Step 4—Determine group roles.

After the activity is presented, it is important for the group members, with or without faculty assistance, to determine the role that each group member will play during the activity. There may be particular roles that are explicitly specified within the context of the activity, such as a role play. However, there are more generic roles that should be filled within any group activity, such as group leader, presenter, and recorder (3.4.2 Designing Teams and Assigning Roles).

Step 5—Facilitate during and after the activity.

During the activity, the instructor should actively observe all the groups. Walk around and listen in on conversations. Are the students on track? Are they focused? Intervene only to get students back on track. Be sure to remind students of the time, and where they should be in the process at that point. However, you need to allow for flexibility as the exercise continues. Sometimes it will take longer than expected to complete the activity, or students will stay on track, but engage in a lively debate over a particular facet of the topic. It is important to balance time on task with this debate to ensure that there is time for closure (3.2.1 Overview of Facilitation).

Step 6—Processing the experience with the students.

When you process the experience with students, a few key questions should be answered. What are the key points that emerged from the groups? What are the points that you want to add to the discussion? How would students describe the success or experience of their group? How was the experience as an individual? Another integral part of processing the experience will include assessing and evaluating performance within the activity. (See Chapter 4 in the Handbook on Cooperative Learning by Apple et al. 2000 for a comprehensive guide to assessment and evaluation of cooperative learning.) When cooperative learning is used in instruction, there are two levels of assessment and evaluation: one for the individual and one for the group. For students to feel validation in the group process, they need to assess their individual role in the group as well as the contribution of their peers. Furthermore, the instructor must assess and evaluate the group’s performance as well as the performance of individuals within the group.

Sample Activities

Cooperative learning can be integrated into a class in numerous ways. Consider the ways activities could be used to begin a discussion, immerse students in content, or summarize a concept or unit of material. Many activities can be converted into group projects if faculty provide guidelines and expectations for the group members. Presentations, research, and even papers can be done collaboratively. Students can be broken into smaller groups and presented with the same discussion questions a faculty member might present to the class as a whole. The following are samples of activities that can be adapted into courses.

Diad and Triad Discussions

Group students in pairs or threesomes to discuss a point from a reading, share their individual responses on assignments, or try to resolve a question or dilemma emerging in the class discussion.

Case Studies

Case studies are scenarios presented to students for analysis. Case studies provide a skeleton of information, but not the entire resolution to the situation. The group is challenged to deconstruct the facts and events of the case and come to a consensus on recommendations or outcomes justifying them by applying course content and theory.

Role Playing

Similar to case studies, role playing immerses students in the content by encouraging them to consider the perspectives and concepts associated with a situation. In role playing, the instructor creates a scenario and roles, assigns those roles, provides information, and asks the groups to enact that scenario by taking on the perspectives of each of the roles. This allows the students to process the case from an individual’s role, interaction between roles, or from an observation of the players.
Jigsaw

In this method, a larger concept is broken into several units, just as it is when it is taught in a more traditional way. Each group is assigned a concept unit; and charged with presenting the material to the rest of the class. In the end, the presentations are all processed together in order to discuss the larger primary concept. Each group then has a piece in the teaching and learning of the concept.

Concluding Thoughts

While there is a great range in ways cooperative learning is implemented in a course, all methods are based upon a set of shared objectives: to increase student understanding and ownership of content and concepts, and to create a dynamic learning environment that actively involves both faculty and students. In the best of scenarios, this leads to greater understanding of content, in both breadth and depth; an ability to articulate this understanding and appreciation of multiple perspectives; and development of academic and interpersonal skills that lead to greater engagement in learning overall. Faculty also benefit from these experiences, finding their students more engaged and interested and being challenged to think about their own perspectives on their discipline.

For all of its potential benefits, cooperative learning is highly dependent upon faculty planning, insight, and facilitation. It is not an easier or less involved way of teaching; in fact, many faculty find it requires a new approach to the content, the students, and their own role in the classroom. Faculty must shift some authority and trust to the students, which involves changing their own role in the class from the provider of knowledge to the facilitator of dialogue from which knowledge emerges. Each faculty member should build his or her own unique approach to cooperative learning. Integrating cooperative learning into a course will often call for logistical strategies as well as conceptual shifts in views on teaching and learning. These shifts and challenges are certainly justified by the potential benefits for students and faculty to share perspectives, learn from each other, and experience the teaching-learning dynamic in a new way.

References


