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Group Learning

Group Learning, Cooperative Learning, and Collaborative Learning are terms used interchangeably in the academic literature because they share one attribute: Learning takes place in groups (typically no more than four students to a group), rather than through instruction delivered in a whole-class setting (Cohen, 1986). Grouping approaches allow the teacher to change the class tempo, reduce teacher-centered instruction, and increase student opportunities to construct ideas (Smith, 2000). For these reasons, learning in groups is a powerful and essential tool for the teacher and demonstrably effective (Elhoweris, 2001; Johnson & Johnson, 1989; Johnson et al., 1981, 1983, 1990; Sharan, 1980; Slavin, 1990 a & b). When compared to students in traditional whole-class or individualized learning, students who have participated in well-structured and meaningful group learning situations have been shown to develop:

- Higher-level reasoning.
- Greater empathy for fellow students.
- Enhanced social perspective taking (the ability to understand how a situation appears to another person).
- Better self-esteem.

However, there are pitfalls, particularly when teachers are not vigilant in monitoring the groups’ activity. When teachers are not attentive to the activity of the groups, a few students in the group may take over and do the majority of work or monopolize the discussion; classroom management problems erupt; and the groups become unproductive, creating apathy. Middle school students typically have extensive experience working in groups from their elementary school settings and expect to find this kind of learning strategy in the classroom; however, some of the behaviors students may have learned because of inattentive teachers will be unproductive and need to be unlearned (Tiberius, 1999).

For the purposes of this textbook, group learning is segregated into two broad categories, the less formal Breakout Groups and the more structured Cooperative Learning Groups. Tiberius (1999), Johnson & Johnson (1989), Johnson et al. (1981, 1983, 1990), Kagan (1989, 1993, 1994), Slavin (1984, 1990), and Ellsworth (2003) offer a number of principles and practices that are applicable to both breakout groups and cooperative learning groups. They provide some of the foundation and many of the strategies proposed in this Topic. The Cooperative Learning Center of the University of Minnesota at http://www.co-operation.org/ was created by Johnson and Johnson, and Cooperative Learning at http://www.cooperativelearning.com/ is sponsored by Kagan and associates, go to Products and then Research. Both sites are worth visiting.

Teacher’s Tip

Learning alone (as opposed to in groups) is preferred more by Caucasian students than by Mexican Americans. It is also preferred more by Mexican American students than by African Americans.

See ERIC 393607 Hispanic-American Students and Learning Style. ERIC Digest.
Breakout Groups

The breakout group strategy is typically used in conjunction with whole-class discussion, lecture, and reading activities, although it can be very effective as an attention-getter as well. The teacher pauses, announces the task, and assigns or allows students to organize themselves into groups of two, three, or four. Students either turn to each other in their desks or move their desks around to form groups. Typically, students are given a task (discuss, create a diagram, etc.) that can be completed in less than 15 minutes. Breakout groups can be organized around existing seating, but it is best to vary the members of the groups so that each student learns to work with all other students. Breakout groups should be formed and unformed quickly with a sense of urgency about getting down to business. They have short-term goals and typically lack the formality and structure of cooperative learning.

While the breakout groups are meeting, the teacher circulates among them to ensure that everyone is participating. For evaluation purposes, if a product such as a graphic organizer is to be created, each student should create his or her own while working with the other students. When members of the group contribute to a project by creating individual components, using a cooperative learning approach may be more effective. Participation in the discussion or activity should be observed and graded as well. Students must be held accountable, so if questioning is used during a debriefing following the breakout groups, the teacher must remember to call on different students on different days and to record their participation and questioning grades. The following are some structured grouping methods that are frequently used with pairs, one form of a breakout group.

1. **Pairs create sequences**: Students write notes on small pieces of paper. Each pair of students compares notes and puts the notes in an order that reflects the organization of the new information.
2. **Pairs compare**: Two students work independently, but are allowed to check one another’s work.
3. **Pairs paraphrase**: The teacher requires one student to paraphrase the other student’s statement, verbally or in writing.
4. **Pairs interview**: After a content presentation or reading assignment, two students interview each other about the information.

Cooperative Learning

Cooperative learning is an effective group learning method that is very structured compared to breakout groups. To be successful in breakout groups or cooperative learning, students must master interpersonal skills (Jacobs, Power, & Inn, 2002). However, one of the goals of cooperative learning is to develop those skills. Cooperative learning promotes thinking skills and positive interdependence among students, while holding each student accountable. The cooperative learning structure helps students develop these skills by providing specific rules and roles during the group activity.

**The Key Elements of Cooperative Learning**

The following describes some of the requirements for effective cooperative learning.

1. **Teacher supervision** is needed to establish the rules. The teacher should observe groups to ensure that all students are gaining from the experience.
If a student is off task or misbehaving, the teacher should join the group to reinforce the rules or answer questions about the assignment.

2. Heterogeneous groups are usually used to ensure that students of different abilities and backgrounds learn to work together to achieve a goal.

3. Positive interdependence is achieved through group goals, joint rewards, divided resources, and role assignments. Students are responsible for their own behavior in the group.
   a. Students are accountable for contributing to the assigned task.
   b. Students are expected to help any group member who wants, needs, or asks for help.
   c. Students will ask the teacher for help only when everyone in the group has the same need.

4. Face-to-face interaction encourages eye contact and verbal and nonverbal responses. Students explain, discuss, solve problems, and complete assignments as a team.

5. Individual accountability requires students to be held accountable for individual tasks that will help the group meet its overall goal. Some possible roles include:
   a. Leader.
   b. Recorder.
   c. Timer.
   d. Encourager.
   e. Reader.
   f. “Gofor.”
   g. Artist.
   h. Proofreader.
   i. Checker.
   j. Observer.

6. Social skills are behaviors that enhance positive interaction and communication among group members. Students learn to compete at a young age, but we must continue to teach middle and high school students to collaborate and use social skills in a cooperative group as well. The teacher needs to review behaviors and establish rules. Students must:
   a. Take turns.
   b. Share information.
   c. Speak quietly.
   d. Listen to the person speaking.
   e. Use time wisely.
   f. Politely criticize ideas, but never people.

7. Group processing is a discussion of how well the group has functioned. Key words for this element are participation, feedback, reinforcement, clarification, and refinement. Group processing allows for closure when a cooperative assignment is completed.

8. Evaluation should include both an individual performance assessment and a team assessment.

How do you personally feel about your experiences in group learning activities?
Primary Cooperative Learning Models

There are numerous models and types of cooperative learning to use, depending on your lesson goals. Table 31.1 provides brief descriptions of the most common models.

<table>
<thead>
<tr>
<th>Name of Model</th>
<th>Brief Description</th>
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<tbody>
<tr>
<td>Co-op</td>
<td>Students work in teams, and each contributes to an assigned product by accepting responsibility for a part of the project.</td>
</tr>
<tr>
<td>Corners</td>
<td>Students form a team in each corner of the room to discuss an idea presented by the teacher. A social studies teacher might ask students to come up with stereotypes of Asian Americans, African Americans, Italian Americans, and Native Americans. Each team discusses the idea and prepares statements about its ethnic group. Each corner shares its idea, and then all four teams listen to and paraphrase each other’s ideas.</td>
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<tr>
<td>Jigsaw</td>
<td>The number of members in a team is determined by the number of separate subtopics. Each student on the team becomes an expert on one of the subtopics by working with the experts on the same topic from the other teams. Upon returning to the primary team, the student teaches the other members about the subtopic. In a biology class, one person in the group might be assigned the heart, another the kidney, etc.</td>
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<tr>
<td>Numbered Heads Together</td>
<td>Every team member is numbered; for example, in a team of four, students would take numbers 1 through 4. The teacher poses questions; team members consult to make sure that everyone knows the answer; the teacher calls a number and that student responds.</td>
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<tr>
<td>Pairs Check</td>
<td>Students work in groups of two pairs each. One student in a pair coaches while the other student solves the problem. Then they alternate. After every two problems, the pairs check each other’s answers.</td>
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<tr>
<td>Round-Robin</td>
<td>Each team member takes a turn to share with classmates.</td>
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<tr>
<td>Roundtable</td>
<td>Each team member writes one answer as a paper and pencil are passed around the group.</td>
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<tr>
<td>Student Teams Achievement Divisions (STAD)</td>
<td>Teams are organized following a lesson, and members help each other master the knowledge. Students take individual quizzes, and the team evaluation is based on the success of individuals.</td>
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<tr>
<td>Teams-Games-Tournament (TGT)</td>
<td>TGT is the same as STAD, but quizzes are replaced with a tournament in which teams compete with each other. Low achievers from one team compete with low achievers of other teams, and each member earns points.</td>
</tr>
<tr>
<td>Team-Assisted Individualization (TAI)</td>
<td>TAI combines group and individualized learning. Students on a team work individually on a self-paced assignment, and members check on each other and help solve problems.</td>
</tr>
<tr>
<td>Think Pair Share</td>
<td>Students think about a topic, pair with another student to discuss ideas, then share their revised thoughts with the class.</td>
</tr>
</tbody>
</table>

Source: Adapted from Kagan (1989).
Grouping Decisions and Tasks

Two key decisions for the teacher have to do with whether students can select their groups or whether the teacher assigns students to groups. The best practice is to incorporate both into your planning. As an example, in Topic 13, I suggested heterogeneous groups when the reading plan calls for students to read in class. In cooperative learning, groups are typically heterogeneous based on a number of variables like achievement and ethnicity. With few exceptions, for heterogeneous groups you need to assign the students to achieve the desired mix to support your goals. If you are using small groups (such as pairs), and if you are using quick groups (whereby students work with the person next to them or in front or behind them), it is easier to achieve your goals and convenient to let students select their partner even if they are not always heterogeneous. In classes where a small number of students might not have mastered some Procedural Knowledge but most of the other students have (such as in mathematics), it would be effective to group those students together so the teacher can reteach the procedures while the other students work on other schoolwork.

Students should be put into groups to perform a task whenever additional, more intimate student-to-student interaction might produce a better result than whole-class instruction. The kinds of “practice” activities envisioned in the Instructional Sequences explained in Topics 20 and 32 are ideal for group activities. The kinds of tasks assigned for group work are similar to those used for self-directed instruction (see Topic 33, Table 33.1) and tend to either be:

1. **Discussion Tasks**, in which students are expected to have a dialogue that results in a more detailed analysis, debate and discussion by the group, and then reports of either personal or group decisions or solutions; or
2. **Product Tasks**, in which a tangible product is produced by each individual or the group, which is facilitated by student collaboration. This would include simulations, skits, and presentations, as well as papers, charts, and results of experiments (see Table 33.1).

When defining the task that will be completed in a group, the teacher must integrate the group activity into the instructional pattern, whether it is a breakout group or a cooperative learning activity. For product tasks, the teacher should have created a model in advance of starting the lesson. For discussion tasks, the teacher should have Class Notes for the debriefing.

**COOPERATIVE LEARNING LESSON**

**INTASC STANDARDS 1–8**

Based on your assigned lesson plan topic from Topic 13, create a cooperative learning lesson and explain how it would include the eight “Key Elements” provided in this Topic. Be prepared to turn the assignment in to your professor and to discuss your ideas in class.