# Cooperative Learning Models

Following are five different methods to incorporate cooperative learning into the classroom.

## Group Investigation

The instructional procedure for implementing the group investigation method involves three processes: (1) investigation, (2) interaction, and (3) interpretation (Sharan & Sharan, 1992). Major features of this approach include the growth of students' initiatives in asking questions to direct research, cooperatively planning the group's research process, and participating in the group's preparation of a final product. These features unfold over a period of time, during which the class (organized into small groups) pursues the investigation of the topic under study, and implementation follows these general guidelines (Sharan & Sharan, 1992).

1. The teacher presents a broad topic for study, and the class determines subtopics and organizes into small research groups.

2. Groups plan their investigation and the roles of each group member.

3. Groups carry out their investigation, during which students acquire, analyze, and evaluate information. Groups assemble, share knowledge, and plan how to prepare their final product.

4. Groups develop a final report and plan to present their findings to the class.

5. Groups make their presentations.

6. Student committees and the teacher evaluate the presentations collaboratively.

For our purposes, group investigation is a(n):

_____ Optimal match

_____ Acceptable match

_____ Poor match or not a match

## Student Team Achievement Divisions

In student team achievement divisions (STAD), students are assigned to four-member learning teams that are mixed in performance level, gender, and ethnicity. The teacher presents a lesson, and students study together within their teams to make sure all team members have mastered the lesson. Then, all students take individual quizzes on the material independently without assistance from one another. Students' quiz scores are compared to their own past averages, and individual improving scores are awarded based on the degree to which each student can meet or exceed his or her own earlier performance. The teacher combines the individual points to form team scores and uses certificates or other rewards to recognize teams that meet certain criteria. The whole cycle of activities, from teacher presentation to team study to quiz, usually takes three to five class periods. A regular cycle of STAD instructional activities can be summarized as follows (Slavin, 1991, 1995).

1. **Teach:** Present the lesson.

2. **Team study:** Students work on worksheets in their teams to master the material.

3. **Test:** Students take individual quizzes.

4. **Individual improvement scores:** Calculate students' improvement points based on how much their quiz scores exceed their baseline scores.

5. **Team recognition:** Compute team scores based on team members' improvement scores, and give certificates or other recognition to high-scoring teams.

For our purposes, student team achievement divisions are a(n):

_____  Optimal match

_____  Acceptable match

_____  Poor match or not a match

## Teams-Games-Tournaments

The teams-games-tournaments (TGT) method relies on the same teacher presentation and teamwork as in STAD, but "replaces the individual student quizzes with weekly or after-unit tournaments in which students play academic games with members of the other teams to contribute points to their team scores" (Slavin, 1996, p. 22). Students then play the games at three-person tournament tables with others of similar performance levels. After the first tournament, students switch tables depending on their performance in the previous tournament. The winner at each table advances to the next highest table, the second scorer stays at the same table, and the third scorer moves to the next lowest table. The winner of each tournament table brings the same number of points to his or her team. At the end of the entire tournament, the teacher compiles team scores. Teammates assist each other in preparing for the tournament by studying worksheets and explaining problems to each other. As in STAD, high-performing teams earn certificates or other kinds of team rewards (Slavin, 1991, 1995).

For our purposes, teams-games-tournaments are a(n):

_____  Optimal match

_____  Acceptable match

_____  Poor match or not a match

## Jigsaw

In the jigsaw method, the teacher assigns students to three-to-six-member home teams to work on sectioned academic materials or assignments. Each member of the group is assigned a section to study; he or she becomes an expert. Experts then convene and form expert groups in which they discuss the information and decide on the best way to present the material to members of their home teams. Then, the home teams reconvene and each member teaches the others about his or her specific section. The teacher administers quizzes and gives teams recognition and rewards in the same fashion as STAD (Slavin, 1991).

For our purposes, jigsaw is a(n):

_____ Optimal match

_____ Acceptable match

_____ Poor match or not a match

## Structured Dyadic Methods

Structured dyadic methods involve pairs of students teaching each other. One of the most widely used methods is classwide peer tutoring, in which the teacher pairs students to tutor one another using a simple study procedure. For instance, tutors present problems to their tutees. If the tutees answer correctly, they earn points. If otherwise, the tutor provides the correct answer, and the tutee writes the answer three times, rereads a sentence correctly, or corrects his or her errors. The tutors and tutees alternate roles every few minutes. As a result, the teacher awards students points for systematically implementing good tutoring behaviors (Slavin, 1995).

For our purposes, structured dyadic methods are a(n):

_____ Optimal match

_____ Acceptable match

_____ Poor match or not a match

*Sources: Adapted from Sharan, Y., & Sharan, S. (1992).* Expanding cooperative learning through group investigation. *New York: Teachers College Press; Slavin, R. E. (1991). Synthesis of research of cooperative learning.* Educational Leadership, 48*(5), 71–82; Slavin, R. E. (1995).* Cooperative learning: Theory, research, and practice (2nd ed.). *Needham Heights, MA: Allyn & Bacon.*