

## **Applications of Cooperative Learning**

Since the 1960s, schools and universities around the world have incorporated cooperative learning into many subject areas from preschool through graduate school and in adult training programs. Three types of cooperative learning are described in the literature: (a) formal cooperative learning, which is used for assignments that can occur from one class period through several weeks; (b) informal cooperative learning, which is used for discussions that last a few minutes up to a class period; and (c) long term cooperative base groups, that last for a quarter/semester or throughout an entire academic year.<sup>1</sup>

### Representative Approaches for Cooperative Learning

Slavin developed a process consisting of heterogeneous four-member teams.<sup>2</sup> In this approach, the teacher first presents an area of knowledge or skill. Students then work in teams to ensure that all members fully comprehend what was presented. Each student takes a quiz and average scores are compared with past quiz averages. The process allows students to encourage one another to master the skills or content provided by the teacher. This method has been used in numerous subjects and with students from second grade through college.

Aronson and his colleagues<sup>3</sup> designed the jigsaw cooperative method. Students are placed in teams and work on material assigned to their group. Then members of each group move to other “expert groups” where each one discusses what their group learned. Students then return to their original group and take turns sharing with their group what they learned while in the other group.

In *Designing Groupwork*,<sup>4</sup> Elizabeth Cohen describes processes to stimulate and enhance groupwork. Group members need one another to complete tasks, which compels communication and the practice of other group skills.

Sharan and Sharan developed the Group Investigation instructional method.<sup>5</sup> This methodology uses six stages of group investigation. In the first stage, participants choose sub-topics and are organized into research groups. In the second stage, groups plan what they will study in their investigation and how they will divide the tasks. In the third stage, students carry out their investigation and seek answers to their questions by locating information. In the fourth stage, groups determine the primary idea of their findings and prepare their presentation. In the fifth stage, presentations are made and feedback is given. In the sixth stage participants evaluate the process.

---

<sup>1</sup> D. W. Johnson, R. Johnson, and E. Holubec. *Cooperation in the Classroom* (6<sup>th</sup> ed.). (Edina, MN: Interaction Book Company, 1998).

<sup>2</sup> Among his many writings see Robert Slavin. Making Cooperative Learning Powerful. *Educational Leadership*. Volume 72 (2) October 2014: 22-26.

<sup>3</sup> E. Aronson, N. Blaney, C. Stephan, J. Sikes and M. Snapp. *The Jigsaw Classroom*. Beverly Hills, CA: Sage, 1978.

<sup>4</sup> See Elizabeth Cohen and Rachel Lotan. *Designing Groupwork: Strategies for the Heterogeneous Classroom*. Third Edition. (New York, NY: Teachers College Press, Columbia University, 2014).

<sup>5</sup> Y. Sharan and S. Sharan. *Expanding Cooperative Learning Through Group Investigation*. (New York, NY: Teachers College Press, 1992).