

# **Introduction to Cooperative Learning**

**Adapted by E. Fox in Jan. 2001 from**  
**“Methods for Developing Cooperative Learning on the Web”**  
**by Roger T. Johnson and David W. Johnson**

## **Objectives**

The objectives of this module are for you to:

- gain a basic understanding of cooperative learning;
- recognize best practices in cooperative learning;
- be able to apply cooperative learning in class group activities.

To achieve these objectives, read the rest of this document and take the related online quiz. Note that quiz questions are keyed to parts of this document (see below) so you can easily review relevant sections if you are unsure of the answer to a question.

## **Sources and Acknowledgements**

Roger T. Johnson and David W. Johnson are the directors of the internationally acclaimed Center for Cooperative Learning at the University of Minnesota. They have over 35 years of experience in teaching, research, and publishing in cooperative learning. The Johnson's have agreed to share their definitions and basic descriptions of cooperative learning contained below. For additional information about the [Center for Cooperative Learning at the University of Minnesota click here](#).

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## **What Is Cooperative Learning?**



Cooperation is working together to accomplish shared goals. Within cooperative activities individuals seek outcomes that are beneficial to themselves and beneficial to all other group members. Cooperative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning. The idea is simple. Class members are organized into small groups after receiving instructions (orally, on paper, and/or online) from the teacher. They then work through the assignment until **all** group members successfully understand and complete it. Cooperative efforts result in participants striving

for mutual benefit so that all group members gain from each other's efforts (Your success benefits me and my success benefits you), recognizing that all group members share a common fate (We all sink or swim together here), knowing that one's performance is mutually caused by oneself and one's colleagues (We can not do it without you), and feeling proud and jointly celebrating when a group member is recognized for achievement (We all congratulate you on your accomplishment!). In cooperative learning situations there is a positive interdependence among students' goal attainments; students perceive that they can reach their learning goals if and only if the other students in the learning group also reach their goals (Deutsch, 1962; Johnson & Johnson, 1989). A team member's success in creating a multi-media presentation on saving the environment, for example, depends on both individual effort and the efforts of other group members who contribute needed knowledge, skills, and resources. No one group member will possess all of the information, skills, or resources necessary for the highest possible quality presentation.

**\*\*\*Now Answer Quiz Questions 1-3 (True/False)\*\*\***

### **Why Use Cooperative Learning?**



Students' learning goals may be structured to promote cooperative, competitive, or individualistic efforts. In contrast to cooperative situations, competitive situations are ones in which students work against each other to achieve a goal that only one or a few can attain. In competition there is a negative interdependence among goal achievements; students perceive that they can obtain their goals if and only if the other students in the class fail to obtain their goals (Deutsch, 1962; Johnson & Johnson, 1989). Norm-referenced evaluation of achievement occurs. The result is that students either work hard to do better than their classmates, or they take it easy because they do not believe they have a chance to win. In individualistic learning situations students work alone to accomplish goals unrelated to those of classmates and are evaluated on a criterion-referenced basis. Students' goal achievements are independent; students perceive that the achievement of their learning goals is unrelated to what other students do (Deutsch, 1962, Johnson & Johnson, 1989). The result is to focus on self-interest and personal success and ignore as irrelevant the successes and failures of others.

There is a long history of research on cooperative, competitive, and individualistic efforts. Since the first research study in 1898, nearly 600 experimental studies and over 100 correlation studies have been conducted (see Johnson & Johnson, 1989 for a complete review of these studies). The multiple outcomes studied can be classified into three major categories: achievement/productivity, positive relationships, and psychological health. The research clearly indicates that cooperation, compared with competitive and individualistic efforts, typically results in (a) higher achievement and greater productivity, (b) more caring, supportive, and committed relationships, and (c)

greater psychological health, social competence, and self-esteem. The positive effects that cooperation has on so many important outcomes makes cooperative learning of great value to students.

The Johnson's have posted in their "[Cooperative Learning And Social Interdependence Theory](#)" the statistical results of over 575 experimental and 100 correlational studies that were conducted by a wide variety of researchers in different decades with different age subjects, in different subject areas, and in different settings. These studies clearly demonstrate the positive effect that cooperative learning has on student academic achievement and social development.

A doctoral student at the University of Dublin Trinity College School of Education wrote an interesting [research paper](#) about the effectiveness of cooperative learning on the development of academic achievement, social skills, friendship patterns, academic self-image, self-esteem and student attitudes on Sixth Class students in an urban Irish primary school. The research was conducted over a two year period and the results were very favorable in areas of cooperation, teamwork, tolerance of others and positive self-esteem.

**\*\*\*Now Answer Quiz Question 4 (Matching)\*\*\***

### **What Makes Cooperative Groups Work?**

Educators fool themselves if they think well-meaning directives to "work together," "cooperate," and "be a team," will be enough to create cooperative efforts among group members. Placing students in groups and telling them to work together does not in and of itself result in cooperation. Not all groups are cooperative. Sitting in groups, for example, can result in competition at close quarters or individualistic effort with talking. If students do in fact work cooperatively with each other they must have an understanding of the components that make cooperation work. Mastering the essential components of cooperation is facilitated if students:

1. Approach existing lessons and course activities as cooperative work.
2. Apply cooperative work concepts to the unique circumstances of the curricula, subject areas, and student body.
3. Help diagnose/report any problems that other students may have in working together so that the instructor can intervene to increase the effectiveness of the student learning groups.

The essential components of cooperation are positive interdependence, face-to-face promotive interaction, individual and group accountability, interpersonal and small group skills, and group processing (Johnson, Johnson, & Holubec, 1993). Systematically applying those basic elements, in group learning situations, helps ensure cooperative efforts and enables the disciplined implementation of cooperative learning for long-term success.

\*\*\*Now Answer Quiz Questions 5-7 (True/False)\*\*\*

**Positive Interdependence** is the first and most important element in structuring



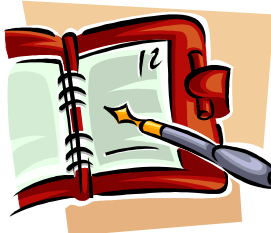
cooperative learning. Positive interdependence is successfully structured when group members perceive that they are linked with each other in a way that one cannot succeed unless everyone succeeds. If group goals and tasks are properly designed and communicated, students will understand that they sink or swim together. When positive interdependence is solidly structured, it highlights that (a) each group member's efforts are required and indispensable for group success and (b) each group member has a unique contribution to make to the joint effort because of his or her resources and/or role and task responsibilities. Doing so creates a commitment to the success of group members as well as one's own and is the heart of cooperative learning. If there is no positive interdependence, there is no cooperation.

\*\*\*Now Answer Quiz Questions 8-10 (True/False)\*\*\*

**Promotive Interaction**, preferably face-to-face, is the second basic element of cooperative learning. Students need to do real work together in which they promote each other's success by sharing resources and helping, supporting, encouraging, and applauding each other's efforts to achieve. There are important cognitive activities and interpersonal dynamics that can only occur when students promote each other's learning. This includes orally explaining how to solve problems, teaching one's knowledge to others, checking for understanding, discussing concepts being learned, and connecting present with past learning. Each of those activities can occur in connection with group tasks if there are proper directions and if appropriate procedures are recommended. Doing so helps ensure that cooperative learning groups are both an academic support system (every student has someone who is committed to helping him or her learn) and a personal support system (every student has someone who is committed to him or her as a person). It is through promoting each other's learning face-to-face that members become personally committed to each other as well as to their mutual goals.

\*\*\*Now Answer Quiz Questions 11-13 (True/False)\*\*\*

**Individual and Group Accountability** is the third basic element of cooperative learning.



Two levels of accountability must be structured into cooperative lessons. The group must be accountable for achieving its goals and each member must be accountable for contributing his or her share of the work. Individual accountability exists when the performance of each individual is assessed and the results are given back to the group and the individual in order to ascertain who needs more assistance, support, and encouragement in learning.

The purpose of cooperative learning groups is to make each member a stronger

individual in his or her right. Students learn together so that they subsequently can gain greater individual competency.

Susan Ledlow from Arizona State University wrote an interesting paper addressing the use of "[Group Grades in Cooperative Learning Classrooms](#)". She discusses the similarities to business where project teams are evaluated and rewarded for their group product.

**\*\*\*Now Answer Quiz Questions 14-16 (True/False)\*\*\***

**Interpersonal and Small Group Skills** is the fourth basic element of cooperative



learning. Cooperative learning is inherently more complex than competitive or individualistic learning because students have to engage simultaneously in task work (learning academic subject matter) and teamwork (functioning effectively as a group). Social skills for effective cooperative work do not magically appear when cooperative lessons are employed. Instead, social skills must be taught to students just as purposefully and precisely as academic skills. Leadership, decision-making, trust-building,

communication, and conflict-management skills empower students to manage both teamwork and task work successfully. Since cooperation and conflict are inherently related (see Johnson & Johnson, 1995), the procedures and skills for managing conflicts constructively are especially important for the long-term success of learning groups. Procedures and strategies for teaching students social skills may be found in Johnson (1991, 1993) and Johnson and F. Johnson (1994).

**\*\*\*Now Answer Quiz Questions 17-19 (True/False)\*\*\***

**Group processing** is the fifth basic element of cooperative learning. Group processing



exists when group members discuss how well they are achieving their goals and maintaining effective working relationships. Groups need to describe what member actions are helpful and unhelpful and make decisions about what behaviors to continue or change. Continuous improvement of the processes of learning results from the careful analysis of how members are working together and determining how group effectiveness can be enhanced.

**\*\*\*Now Answer Quiz Questions 20-40 (True/False)\*\*\***

## References

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