

Research Based Strategies for the Classroom

Part # 7 - Cooperative Grouping

Introduction

Cooperative learning is actually a generic term that refers to numerous methods for grouping students. At least 10 different methods have been formally described in the research literature. Therefore, "cooperative learning" as a strategy requires a closer look to take advantage of potential benefits for learners. Effective cooperative learning occurs when students work together to accomplish shared goals and when positive structures are in place to support that process (Johnson & Johnson, 1999). Even though appropriate use of student groups for learning has been shown to yield significant learning improvement across disciplines, the successful application of cooperative grouping in classrooms still eludes many educators (Johnson & Johnson).

Criteria for effective cooperative learning groups include:

- Students understand that their membership in a learning group means that they either succeed or fail—together. (Deutsch, 1962).
- "Positive interdependence" includes mutual goals, joint rewards, resource interdependence (each group member has different resources that must be combined to complete the assignment), and role interdependence (each group member is assigned a specific role).
- Students help each other learn and encourage individual team members' success.
- Individuals in the group understand that they are accountable to each other and to the group as a distinct unit.
- Interpersonal and small-group skills are in place, including communication, decision making, conflict resolution, and time management.
- Members are aware of the group's processes. Individual members talk about "the group" as a unique entity.

Key Research Findings

- Organizing students in heterogeneous cooperative learning groups at least once a week has a significant effect on learning (Marzano, Pickering, & Pollock, 2001).
- Low-ability students perform worse when grouped in homogeneous ability groups (Kulik & Kulik, 1991, 1997; Lou et al, 1996).
- There may be no other instructional strategy that simultaneously achieves such diverse outcomes as cooperative grouping. The amount, generalizability, breadth, and

applicability of the research on cooperative, competitive, and individualistic efforts provides considerable validation of the use of cooperative learning to achieve diverse outcomes, including achievement, time on task, motivation, transfer of learning, and other benefits (Cohen, 1994a; Johnson, 1970; Johnson & Johnson, 1974, 1978, 1989, 1999a, 2000; Kohn, 1992; Sharan, 1980; Slavin, 1977, 1991).

- Cooperative learning can be ineffective when support structures are not in place (Reder & Simon, 1997).

Implementation

Grouping students to work collaboratively and cooperatively offers benefits for learners. Teachers who are successful at facilitating cooperative learning employ research-based strategies, such as:

- 1. Create the right type of group for the need.** Sometimes an occasional informal ad hoc group is needed, such as pair and share. Base groups are formed for long-term social and interpersonal support. Formal learning groups are used when a commitment of time and effort is required.
- 2. Keep group size small.** Ideally, learning groups include no more than four students. Base groups may be larger, up to six students.
- 3. Use ability grouping sparingly.** Students across the spectrum of abilities benefit by heterogeneous grouping, especially low-ability students.
- 4. Don't use cooperative learning for all instructional goals.** While cooperative learning is a powerful strategy, it can be overused, or misapplied. Students need time to investigate ideas and pursue interests on their own.
- 5. Use a variety of strategies when choosing students for groups.** Many selection strategies (common clothing, favorite colors, letters in names, birthdays) will work when attempting to randomly group students.
- 6. Facilitate success.** Develop organizational tools, forms, learning journals, and other structuring documents that foster the smooth processes needed for effective cooperation and group work. Use online tools for ubiquitous access to forms.
- 7. Support new groups.** Cooperative learning is a practiced skill that requires monitoring and adjustment. Teach specific skills before grouping students, define criteria for success, and develop rubrics for key expectations. Meet with new group members to support their success.

Additional Resources

The Cooperative Learning Center is a Research and Training Center housed at the University of Minnesota focusing on how students should interact with each other effectively. There you'll find articles, research, a newsletter, and other resources. The research team of Roger T. Johnson and David W. Johnson will even answer questions sent by teachers on cooperative learning, and past answers can be found in their Q & A section. <http://www.co-operation.org/>
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