

Training Teachers for Cooperative Learning

Creating a cooperative classroom for themselves in a workshop setting is valuable preparation for teachers who wish to foster norms of helping and sharing among their students.



A teacher shares his observations of a cooperative learning simulation game with the rest of the "class."

Cooperative learning encompasses a wide range of strategies for promoting academic learning through peer cooperation and communication. As the term "cooperative learning" implies, students help each other learn, share ideas and resources, and plan cooperatively what and how to study. The teacher does not dictate specific instructions but rather allows students varying degrees of choice as to the substance and goals of their learning activities, thus making students active participants in the process of acquiring knowledge.

Teachers learn their role in cooperative learning from practice over time, as do students. First and foremost, the teacher must model the social and communication skills expected from the students. Cooperative learning in the classroom requires that helping, sharing, and cooperating become classroom norms. The gradual introduction of cooperative games, learning tasks, and activities helps teacher and students alike acquire communication and helping skills and the rudiments of small-group organization (Slavin et al. 1985, Sharan 1984, Sharan and Hertz-Lazarowitz 1980). A comprehensive overview of games and learning activities, and of the cognitive and social skills these activities seek to develop, can be found in many sources (Cohen 1987; Graves and Graves 1985; Johnson and Johnson 1987; Kagan 1985; Orlick 1978, 1982; Sharan and Sharan 1976; Slavin 1986).

The Experiential Learning Model

Cooperative learning differs considerably in theory and in practice from traditional whole-class instruction and requires a different approach to teacher training. Cooperative learning does not involve production-type tasks, where every element is specifiable and where outcomes are largely predictable. While the discussion skills and helping behaviors required for cooperative learning are indeed specifiable, we cannot always stipulate their outcomes.

Cooperative learning encourages, and is in fact built upon, the contributions of group members. Even in the most highly structured cooperative learning situation, such as students' tutoring one another in a vocabulary list, their interaction cannot be controlled. The teacher, therefore, must be comfortable with varying degrees of uncertainty as to what each group member will contribute. He or she must be willing to acknowledge diversity among pupils in interests, talents, and pace of work.

Prospective teachers of cooperative learning must make independent decisions as to how to balance cooperative behaviors and academic skills and goals. Their training, therefore, should focus on developing skills for organizing cooperative learning as well as skills for analyzing and evaluating the lessons in terms of their effects on children's cooperative behaviors and

on their academic learning. A learning model based on Kolb's (1975, 1986) experiential learning theory is particularly appropriate for such training. Kolb presents a "holistic integrative perspective on learning that combines experience, perception, cognition, and behavior" (1986, p. 21). This model is rooted in John Dewey's philosophy of education and in Kurt Lewin's integration of scientific inquiry and social problem solving. Both Dewey and Lewin viewed learning as based on personal experience, provided the learner has the tools with which to observe and analyze the effects of experience.

Within the experiential learning model, concrete experience is the catalyst for learning (fig. 1). Learners participate in activities that serve as a basis for observation of the process as well as reflection on the effects of the experience. Their reflections are organized into general principles about the topic being studied and are assimilated into generalizations that direct their application in new situations. Chickering (1977) sums up the four different capabilities fostered by this learning model:

The learners must be able to enter new experiences openly and fully without bias; they must be able to stand back from these experiences, observe them with some detachment, and reflect on their significance; they must be able to develop a logic, a theory, a conceptual framework that gives some order to the observation; and they must be able to use these concepts to make

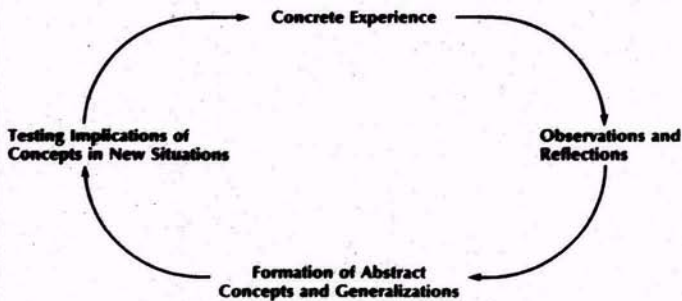


Fig. 1. The Experiential Learning Model

decisions, to solve problems, to take action (p. 18).

The new action then becomes a new concrete experience that generates new observations, and so forth, as the cycle repeats.

A Cooperative Learning Experiential Workshop

Each stage of the experiential learning model has an application when we train teachers to use cooperative learning methods. Advocates of experiential learning have developed a pool of tasks, exercises, and games that simulate cooperative learning for teachers and involve them directly in cooperative interactions with their peers. The activities challenge teachers' thinking about learning and teaching and generate insight into the basic features of learning cooperatively.

Stage 1: Concrete Experience. Cooperative learning training workshops employ a variety of experiences that are particularly suited to adult learners of different ages with diverse backgrounds and interests. (In fact, diversity is essential for developing cooperation.) Workshop groups are formed randomly, and each teacher is encouraged to make a unique contribution to the group's cooperative effort. Thus,

from the onset of the workshop, teachers experience one of the basic elements of cooperative learning: acknowledgment and acceptance of other people's ideas and viewpoints.

This principle is illustrated by one of many activities suitable for the opening session of a workshop: preparing a group poster. The trainer gives groups of four or five teachers magazines, tag board, felt markers, scissors, and paste and asks them to create a group poster. The only specific requirement is that the product must reflect the ideas of every member of the group.

Creating a poster exposes teachers to a rich constellation of cooperative procedures. In order to decide which form the poster will take, teachers must exchange ideas and share feelings about their understanding of the assignment and about how to organize their work. They also share their feelings about the procedure. Some teachers may express frustration at the lack of specific directions for carrying out the task, while others may feel more comfortable precisely because the directions give them an opportunity to act independently and make their own decisions. Involvement in the discussion as well as in the actual preparation of the poster illustrates an essen-

tial feature of cooperative work: individual group members helping each other plan and achieve their collective goal.

After completing the posters, each group presents its product to the class. Each poster is unique because it emerged from the combined input of that particular group's members. Later, the groups report how their posters evolved, illustrating similarities as well as differences in how each group organized its work. By listening to the reports, the trainer gains information about the teachers' knowledge, opinions, and skills and thus can informally assess their familiarity with cooperative learning. Finally, hanging the posters on the wall creates a sense of belonging to the group and to the class as a whole.

An activity appropriate for a later workshop session is a "fishbowl" discussion in which teachers form two concentric circles. Teachers in the inner circle discuss a previously determined topic. Those in the outer circle, who serve as observers, complete a short questionnaire on how often the observed teachers participated in the discussion, whether the speaker's remarks were relevant to the topic, and so on, depending on the particular discussion skills the trainer seeks to develop. After the observers report on the discussion process, the participants conduct another discussion, refining certain behaviors accordingly. At the next opportunity, observers and participants reverse roles.

In addition to giving participants actual practice in communication skills (e.g., discussion and feedback), this "fishbowl" exercise demonstrates that cooperative learning skills are amenable to development. As they practice these skills, the teachers also increase their awareness of how to cultivate the skills among their students.

To sum up stage one of the model, in the course of the workshop the trainer conducts a series of games, exercises, and simulations that illustrate different ways of organizing groups, a variety of cooperative learning tasks, and a wide range of commu-

nication skills. In effect, these experiences are the "content" of the workshop. Instead of learning *about* a cooperative classroom, the teachers *create* one for themselves, by themselves. Effective transfer from the workshop to the classroom depends on the next three stages.

Stage 2: Observations and reflections. During the next stage learners reflect on the experience's significance for them both personally and professionally. Reflection is the bridge between the concrete experience and the formal learning of relevant concepts. Teachers share their reactions to the events that occurred during the concrete experience.

Observations and reflections are generally shared during a discussion, which can be conducted first in "buzz" groups or in pairs, followed by quartets and then classwide. Sometimes trainers will suggest that teachers write down individual reactions to the exercise before sharing them.

It is useful from time to time to have teachers take turns as observers of the experience. Their reactions supply another source of perception and point of view. This role will enhance teachers' awareness of the complexities of interaction within a group.

Three questions (Pearson and Smith 1985) lend structure to the process of observation and reflection: What happened? How did the participants feel? What does it mean?

What happened? A common starting point is for teachers to help each other reconstruct the event. Sharing perceptions becomes a vivid reminder that not everyone perceives the same event in the same way—a fact we all know but often forget! Teachers do not try to recall every detail of what happened; rather they are instructed to emphasize the general sequence of events and how group members contributed to the process.

How did the participants feel? After clarifying their personal and collective perceptions of the exercise, teachers reflect upon positive as well as negative feelings evoked by the experience. The trainer must establish an atmosphere of trust and acceptance so

that teachers will be willing to "risk" exposing their feelings without censure.

What does it mean? Next, teachers explore the meaning of the experience and of the feelings it aroused. From personal meanings they construct generalizations about cooperative activities. For example, how did they feel about a loosely structured activity? Did some teachers find it easier to assume leadership roles when there was no designated leader? Did paraphrasing another's remarks require unusual amounts of concentration?

With time and practice, teachers integrate seemingly disconnected features of cooperative learning activities into a meaningful whole, making the connections between particular tasks and social skills. Group members begin to associate cooperative learning activities with the corresponding cooperative behaviors.

Stage 3: Formation of abstract concepts and generalizations. During the next stage, the teachers organize the outcomes of observation and reflection into concepts, formulating them according to the terminology of the cooperative learning field. This creates a common professional vocabulary for all participants. In this stage the trainer's role is more direct than heretofore. Now he or she functions as "the interpreter of a field of knowledge and a guide to ... the manipulation of terms and concepts" (Kolb and Lewis 1986, p. 101). The trainer may at this time assign readings to be done during the workshop or at home.

After debriefing several activities, teachers begin to recognize the essential features of a cooperative learning task, concluding that some tasks call for sharing and exchanging ideas, for planning together, or for solving problems and making decisions. These findings may be posted on a chart for future reference. Other activities will familiarize teachers with more features of cooperative learning, and the list can be expanded. When teachers have experienced, reflected upon, and clarified different types of tasks, they will be able to formulate a typology of

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“Reflection is the bridge between the concrete experience and the formal learning of relevant concepts.”

cooperative learning tasks.

The same process takes place in relation to communication skills. As a result of repeated activities and debriefings, teachers become familiar with an array of skills required for smooth group functioning. In addition to generalizing about the various skills themselves (e.g., listening, paraphrasing, giving feedback), teachers match the skills with appropriate tasks. A “jigsaw” task, for instance, calls for listening, sharing ideas, and reaching consensus. On the other hand, a “buzz” group discussion, prior to a classwide deliberation, remains open-ended and requires no consensus. Similarly, teachers analyze other features of cooperative learning, such as which tasks call for a group product and how the product reflects the group effort.

Stage 4: Testing applications of concepts in new situations. Activities per-

formed in this stage help teachers apply knowledge and skills gained in the previous stages to their own lesson planning. At first they may plan isolated tasks that emphasize only one or two cooperative learning elements. As their ability to integrate the variety of factors that constitute cooperative learning increases, their plans become more complex.

At this stage the trainer may group teachers by grade level and content area to facilitate practical application of their planning. Together, teachers choose a unit of study and decide which aspect of the unit is appropriate for cooperative learning. Each group determines the goal of the cooperative lesson, the types of tasks that will achieve the goal, and the kind of product the student group will create. They focus on formulating clear instructions for students that correspond to the teacher’s objectives.

ORGANIZATION How many in group? What or who determines group composition?	TASK Describe task.	GOAL Group or individual?	COOPERATIVE SKILLS Communication, interaction.	PRODUCT Group or individual?
SESSION 1 1. 5-6, random composition, by choice.	CONCRETE EXPERIENCE: Create a poster that will represent your group.	Group goal—all members must contribute (positive interdependence).	Cooperative planning; sharing ideas; decision making; group members determine their own organization of the task.	Group product— poster.
2. Individual, then pairs, then quartets.	OBSERVATIONS AND REFLECTIONS: Conduct discussion: debrief how group organized its work and the interaction that took place.	Share ideas and feelings.	Listening; taking turns; exchanging and synthesizing ideas.	Combined list of processes that group experienced.
3. Classwide organization (class is group of groups).	FORMULATING GENERALIZATIONS: a. Representative from each group reports on its list of findings. b. Whole class categorizes basic principles of small-group work.	Exchange ideas; synthesize ideas; generalize principles.	Listening; taking turns; accepting diversity.	Combined list of principles of group work (chart posted on wall).
4. 4-5, by grade level.	PLANNING IMPLEMENTATION: Plan learning task for students that requires cooperative planning.	Group goal.	Listening; sharing, exchanging, and synthesizing ideas.	Group lesson plan that incorporates cooperative planning.
5. 4-5, by grade level.	Two groups compare tasks; evaluate according to list of principles formulated in activity #3.	Group goal.	Listening; sharing, exchanging, and synthesizing ideas.	Combined lesson plan based on intergroup cooperation.

Fig. 2. Cooperative Learning Experiential Workshop

“With time and practice, teachers . . . associate cooperative learning activities with the corresponding cooperative behaviors.”

The trainer at this stage becomes a coach, reminding the teachers of basic principles learned in previous stages and encouraging them to evaluate their plans. Indeed, a lively discussion of what is and isn't appropriate for a cooperative learning lesson usually occurs during this activity. Teachers have yet another opportunity to clarify and integrate the elements of cooperative learning acquired in the workshop. The plans they design together validate their learning.

Throughout the training teachers have had ample opportunity for subjective experiences as well as objective ones (in the first three stages) with cooperative learning. In this fourth stage, while designing cooperative learning situations for the real world of their classrooms, teachers recreate their learnings by synthesizing their subjective preferences with the method's objective requirements. Trainers can facilitate the transition from planning to classroom implementation by having teachers "rehearse" the experience in the relatively safe environment of the workshop setting. Whether teachers experiment in the workshop

or in their own classrooms, these applications become new concrete experiences. Time is then set aside for teachers to reflect upon the experience, draw conclusions, and modify plans for future implementation. Figure 2 illustrates the four stages of an experiential workshop in cooperative learning.

Something to Take Back

By following the stages of the experiential learning model, teachers become active participants in the process of acquiring cooperative learning skills and concepts. The workshop is particularly effective if teachers from the same school attend. Together they acquire a common technical vocabulary and establish norms of behavior that facilitate the continuing development of cooperative learning in their school (Little 1982).

If the teachers are trained together and continue to function as members of small groups or teams, and if the teams are devoted to mutual assistance in the trial of new strategies, cooperative learning will be sustained in a school (Joyce and Showers 1987, Sharan and Hertz-Lazarowitz 1982).

Our goal is to train teachers who can use a variety of cooperative learning strategies and then analyze their efforts. We also hope that teachers may come to see each other as valued resources for both implementing and evaluating their own modifications of cooperative learning strategies. □

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