

# 1 An Advanced, Modern Form of Cooperative Learning

The concept of cooperative work groups acquires its roots in the group investigation model of cooperative learning—a teaching methodology that implements long-term projects involving student problem solving. Current research into student learning styles and teacher interaction has been integrated into the model, resulting in the development of this new material on cooperative work groups.

The group investigation model was developed in detail by the Sharans in the 1980s (Sharan, 1994; Sharan & Sharan, 1992; Sharan et al., 1984), based on the original work of Thelan (1954, 1960). What particularly distinguished this particular teaching methodology from the various models of Slavin (Slavin, 1995; Slavin et al., 1989), the Johnsons (1986), or Kagan (1989), is that unlike most representative classroom cooperative learning situations, which may last a few hours at most, in group investigation, students typically work on projects that range from short term (a few days) to long term (weeks or months). This extended interactive experience is the type of cooperative work group situation that most resembles the requirements of today's business (see Carnevale, 1996, 1991; Carnevale & Porro, 1994; Carnevale, Gainer, & Meltzer, 1990).

In the business world, projects are rarely conducted or concluded within a couple of hours. On the contrary, a business cooperative work group may be in operation over a period of years, depending on the scale of the particular project. The ability to function successfully and efficiently within a long-term cooperative work situation is a critical skill for students to learn if they are to be active, successful participants in the twenty-first century American economy.

This section is *not* a text devoted to the teaching of a particular cooperative learning model. There are numerous other books that review in great detail how one uses those various teaching methodologies. Rather, the focus of this text is the adaptation of the core components of the group investigation method of cooperative learning to the typical classroom as part of the cooperative work group concept. However, it is important for the reader to review the fundamental stages involved in this methodology prior to the discussion.

According to Joyce and Weil (2000) in *Models of Teaching*, there are six basic phases in the group investigation model:

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*Phase 1: Students encounter puzzling situation (planned or unplanned).* The students must feel that there is some type of “problem” that needs to be solved by their investigation.

*Phase 2: Students explore reactions to the situation.* The class as a whole discusses the variables involved in the problem and possible avenues to investigate.

*Phase 3: Students formulate study task and organize for study (problem definition, role, assignments, etc.).* The students then are divided into cooperative groups. The groups discuss and plan the scope and sequence of their own investigation, based on the parameters established by the initial class discussion and requirements.

*Phase 4: Independent and group study.* The students use the resources available to complete their part of the class investigation.

*Phase 5: Students analyze progress and process.* Each group’s progress is discussed by the class as a whole.

*Phase 6: Recycle activity.* Based on the students’ progress, the investigation is continued, adapted, or changed, and the activity is started once again upon conclusion.

Although this particular teaching model has proven highly successful (see Sharan, 1994; Sharan et al., 1984), there are certain facets of the methodology that are problematic when transferred to the adult business environment. For example, Thelan (1954, 1960) believed that the student groups were to be created according to the personal interests of the students. Unfortunately, in most instances, this is not the situation in the business world. Cooperative work groups that adults will be required to face are formulated on the tasks necessary for the completion of specific work objectives. Employees in the business arena are placed within groups based on job descriptions, personal skills, and the specific tasks required, not on their own personal interest. This is contrary to current Cooperative Learning practices, where the students are regularly placed within groups that they individually select.

Another problem exists with the group investigation model—it is *completely* student centered. The teacher assumes a purely secondary role. Even Joyce and Weil (2000) categorize the group investigation model as part of “The Social Family” of curricular methodologies, with the social aspects—not the task—being the primary driving force. Again, this is not the type of work environment students will face when they enter the twenty-first century work world.

Traditional cooperative learning methodologies, including the group investigation model, have all primarily concentrated on the interaction of the members of the group as they attain a particular goal. Little emphasis is placed on the individual (other than as a component of the overall group), nor on the medium in which the tasks are accomplished. Whereas this methodology was a dramatic, and highly successful, departure from the “traditional” classroom of the twentieth century, it falls short of what is required of the workforce in the new millennium.

Although the previously cited research proved the overall success of cooperative learning, there were significant shortcomings when these data were applied to the average classroom. Unfortunately, the bulk of the research on this teaching methodology concentrated on the outcomes of the specific cooperative learning models, models that carry strict procedures for the teacher to follow, allowing limited deviation.

Little has been written on *why* or *how* cooperative learning works, or on core theoretical components that can be transferred to a variety of teaching situations.

This is a crucial omission, for every teaching situation is different—just as is every business. Rather than have the participants adapt their learning or teaching styles, individual personalities, and school environments to an outside instructional model, teachers and students need to know the basic concepts of “what works” within a cooperative work group experience. The specific six phases of the group investigation model enumerated above may not be appropriate for all cooperative work group situations. However, the basic, essential components of successful group investigation work can be adapted to all situations. It is on these general, applicable teaching components that this text now focuses.

The cooperative work group concept takes the fundamental components of cooperative learning and “modernizes” them for the requirements of the twenty-first century workplace. This is accompanied by the incorporation of brain-based research and the integration of new technology. The brain-based research, here taking the form of the multiple intelligences theory (Gardner, 1993), helps teachers determine the most efficient way in which their students learn. In other words, individual learning styles are dealt with in conjunction with the specific cooperative tasks of the group, thereby allowing the group to function more efficiently and productively. The integration of technology, in this case, the Internet, allows the students in the work groups to make use of the most modern, available resources in their pursuit of the group’s tasks and goals. Both of these important areas—brain-based research and technology—are discussed in detail in subsequent chapters. For now, the discussion is directed to characteristics of the cooperative group work environment.

There are five basic components of the cooperative work group environment that are primary and integral in all classroom situations. These are not “phases” as enumerated in Joyce and Weil’s research, but features of the cooperative work group philosophy that work together to provide a positive, successful learning experience:

### ***1. Group Formation***

How are the groups constructed?

*This is the planning process in which the teacher engages to compose the most efficient groupings based on the goals of the experience.*

### ***2. Leadership***

How does the group actually function, based on the specific leadership personalities of the participants?

*This is a primary aspect of traditional cooperative learning that has been “mishandled” or ignored in the past.*

### ***3. Materials***

How does the teacher supply the student groups with the materials required to accomplish the groups’ goals?

*This is the area where implementation of group investigation experiences has traditionally failed, for if there are insufficient materials, there can be no investigation.*

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### 4. Teacher Role: Critical Thinking and Classroom Management

How does the teacher interact with the students, and what is the impact of this on the groups' dynamics?

How can the groups function efficiently and successfully in an environment so foreign to the traditional classroom teaching methodology?

*The first area—teacher interaction—is often ignored in the research on cooperative learning methodology, but has tremendous ramifications on the critical thinking levels of the students. Concerning the latter, success with classroom management issues can make or break cooperative learning projects for the entire year.*

### 5. Assessment

How does the teacher assess whether or not the cooperative group experience was successful for both the individual students and the group as a whole?

*This is an area that most concerns administrators, parents, and students, and must therefore be adequately addressed.*

The subsequent chapters discuss how the teacher can successfully implement each of these important facets of the cooperative work group environment into a traditional classroom.

## PUTTING THEORY INTO PRACTICE: HOW COULD THEY MAKE A DIFFERENCE?

Mr. Washington's American History students were discussing the period referred to as the "Gilded Age," particularly the problems that the new urbanization created at the turn of the twentieth century. Eventually, the classroom discussion led to a comparison of how societal problems were addressed then as compared to today. They discussed how cities became overcrowded, how there were virtually no health, safety, or child labor laws applicable to protect the worker, and that there were no social service organizations to assist those who found themselves out of work and destitute.

When the subject of the homeless in twenty-first century America was raised, the students discussed various efforts their own school had made on behalf of the homeless, in particular, a successful canned food drive the previous Thanksgiving. Mr. Washington pointed out how the homeless in our country eat fairly well during the holiday season, but often go hungry the remainder of the year. Noting that it was now March, each of the students in the class admitted that not one of them had made a contribution to the homeless since New Year's.

Mr. Washington then showed a videotape of some of the real, everyday stories presented on the Comic Relief broadcast—the semi-annual fund-raising drive for the homeless in America. The five-minute vignettes portrayed "normal" people, including children, who became homeless due to calamities such as unexpected unemployment, illness, or simply being evicted from an apartment. The broadcast interviews with school-age children and their parents dispelled the myth that the homeless were "bums," but were instead people just like the students.

Following this emotional experience, the students decided that they wanted to make a difference in their society, that they wanted to do something to help the homeless in their community.

Mr. Washington's class chose to create a schoolwide awareness campaign to move the concept of helping the homeless from a "special-event" status (i.e., the annual food drive) to one of an everyday activity in their lives. They determined that their project would take two forms. First, the students decided that they would present a schoolwide assembly, the goal of which was to introduce and inform the student body of the overall problem. In turn, they would also create and provide everyone with an original "Help the Homeless" brochure—a "handbook" or reference that students would use throughout the year to make an individual difference in their community.

With their solution to this problem basically designed, Mr. Washington's students then decided to break up into cooperative work groups, with each group taking on one particular aspect of the project. The following describes the five different groups and the work that they accomplished:

- *Drama Group*. This group was charged with the responsibility to create and present a short play highlighting the plight of the homeless. They first went online and did a METACRAWLER<sup>1</sup> search using the term *homeless* and received sixty-two different links to Internet sites containing relevant information. Using the data provided on these sites, they were able to acquire the material needed for their play, which was produced and practiced by the group and presented at the all-school assembly.

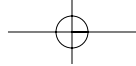
- *Music Group*. This group's responsibility was to create and present a song, using original lyrics, that also highlighted the plight of the homeless. They also went online and used some of the information that the Drama Group had located. They then rewrote the lyrics to the song "God Help the Outcasts" (Menken & Schwartz, 1996). The group learned, choreographed, and presented it during the assembly.

- *Literature Group*. This group developed a few personal anecdotes for both the assembly and the "Help the Homeless" brochure by using the same Internet sites discovered above, along with material gleaned from the Comic Relief shows.

- *Brochure Group (Investigation)*. Again, using the Internet links previously discovered, plus the local telephone directory, this group researched and identified the various homeless agencies within their city. They organized the information into the following categories: address, telephone number, hours of operation, type of services offered, and initial contact person. Most important, they also investigated what a person their age could individually do to assist these agencies.

- *Brochure Group (Publication)*. This group first collected and investigated various types of brochures used to disseminate information. Then the students designed, typed, and constructed the "Help the Homeless" brochure that was distributed to the entire student body.

Ultimately, through the use of a cooperative work group experience incorporating Internet resources and a variety of presentation modes, Mr. Washington's class created and produced an extremely successful program addressing the problem of how students can help with the homeless in their community.



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### **NOTE**

1. All Internet sites in the text (unless they are within a direct quote from an online source) are represented in capital letters, with their URLs listed in Resource A. This saves the text from being cluttered with the long lists of letters and numbers common to Internet addresses.

