***Cooperative Learning at the***

***College Level***

*By Laura M. Ventimiglia*

If the United States is to be competitive in the global

marketplace, we must first teach our students to be cooperative

with one another. This irony must be addressed. The changing

workplace of today is relying more and more on the interdependence

of individuals in work teams for higher productivity.

Employees, from factory line workers to CEOs, are being

expected to work cooperatively in their own specialized areas as well

as in the areas of creative problem-solving and decision making

(Loewenwarter, 1988; Offerman and Gowing 1990; Sundstrom,

DeMeuse, and Futrell, 1990; Ward and Pearce 1990).

Students in cooperative and collaborative learning classes

recognize that learning how to work with others will be extremely

advantageous to their careers. Yet, according to Kohn (1986), such

cooperation is contrary to the addictive socialized behavior of

competition in the United States.

Given such an obstacle, it becomes critical for our educational

system to produce students who are able to work with others. With

the increasing need for college degrees in preparation for the

workforce, college professors become the last link between young

people and the workplace.

**Those Who Do**

Professors where I teach have shown, in both introductory and

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THE NEA HIGHER EDUCATION JOURNAL 5

/prod/ta/W94D doc:W94 12/19/93 REPRO

upper level courses in the disciplines of history, political science,

English, math, and chemistry, that cooperation and collaboration

are effective teaching and learning strategies. In fact, whole

programs at these colleges—Writing Across the Curriculum, Freshman

Seminar, and many others—are built around these concepts.

Faced with the responsibility of providing students with new skills

for new times, faculty are initiating cooperative experiences in their

classrooms and in their own practice with colleagues.

Their cooperative and collaborative teaching and learning

strategies also have the advantage of improving student learning

and retention. The research on cooperative learning shows an

increase in student achievement (Slavin 1989/901; Johnson,

Johnson, and Smith 1991a, 1991b). Research also indicates that

meaningful learning—learning that connects new information to

existing cognitive structures of an individual—is more effective

(Johnson, 1975).

The shift from a professor-centered to a student-centered

learning situation allows students to construct new knowledge by

building on existing schemas. Students also share in the ownership

of course content, making it more meaningful and useful. The role of

professor is transformed from one of deliverer-of-information to one

of colleague and mentor. Belenky, Clinchy, Goldberger, and Tarule

(1986) refer to this role as one of a midwife.

Midwife professors ‘‘assist . . . students in giving birth to their

own ideas, in making their own tacit knowledge explicit and

elaborating on it’’ (p. 217). Freire (1970) and Sizer (1984, 1992)

support this approach to education with their descriptions of

educators as co-investigators and coaches.

The methodology of cooperative and collaborative teaching is

also important because of the skills students develop from this

process approach to education. The two skills we will all need to be

successful in the workforce 2000—neither of which is taught as the

content of a course or from a textbook—are the ability to work

together cooperatively and the ability to be a life-long learner.

***With cooperative and collaborative***

***learning, students share in***

***the ownership of the course content,***

***making it more meaningful.***

6 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO

Industrial/organizational psychologists point out that in our fastchanging

society people will need to change or relearn their careers

eight to 13 times during their lifespan (Schultz and Schultz, 1990).

Both cooperative and collaborative learning, in any discipline,

give students the opportunity to learn these skills by completing the

course as designed and by imitating the academic behaviors modeled

by the professor. In the cooperative and collaborative learning

patterns, we model our actual work processes—students can see us

struggling to solve a problem, interpreting a primary source, or

revising a paper.

*Different Models to Education*

The *traditional* approach to education, described as the banking

model by Freire (1970), has been the lecture format where

information is ‘‘deposited’’ into students. The professor, one who

considers himself knowledgeable, dictates both the form and content

of course requirements by bestowing on those he considers to know

nothing, the students, the information that he determines is

appropriate for them and society. Freire points out that, in this

model, students are expected to adapt to their world, not transform

it, by passively receiving this information.

Jane Tompkins (1990) describes another, more contemporary

approach called the *performance* model. Even though students may

become more involved in the process of their own education by

choosing their own topics for research papers and by suggesting

topics and readings for class discussion, Tompkins suggests that

professors are basically concerned, as she was, with how well they

perform in the classroom. A professor who teaches under the

performance model generally wants to show students how smart she

is, how knowledgeable she is, and how well-prepared she is for class.

I would like to suggest yet another approach to education: the

*collaborative* model. The collaborative model builds on cooperative

learning strategies but extends beyond having the students work

together to complete a pre-determined task. In collaborative learn-

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THE NEA HIGHER EDUCATION JOURNAL 7

/prod/ta/W94D doc:W94 12/19/93 REPRO

ing, professors and students actively and mutually engage in the

learning process. Together, they define and create a body of

knowledge that informs and transforms our world. In this approach

to education, professors are, in fact, midwives, co-investigators,

coaches, who together with their students construct the knowledge

for the course.

As a psychology professor at both a community college and a

comprehensive liberal arts state college, I want my students to be

empowered to change the world in which we live. To do this, they

need to learn to use their minds well while critically learning the

content of the course. They need to learn to respect themselves and

respect others.

Cooperative and collaborative strategies accomplish this and, at

the same time, develop a culture for quality work. As mentioned

above, cooperative and collaborative techniques are not particular to

any one discipline.

Faculty seem committed to the concept of cooperative and

collaborative learning, but many do not understand that success at

these approaches is grounded in the structure designed by the

professor. Using cooperative and collaborative techniques requires a

tremendous amount of work before, during, and after actual class

time.

**Cooperative and Collaborative Techniques: Past and Present**

During my first semester of teaching, I structured my classes to

actively engage students in the learning process. Students generally

came to class excited and ready to learn, but something was missing.

I realized that students evaluated themselves and others according

to ‘‘intellectual abilities.’’

Those who were ‘‘smart,’’ who stayed focused on the task at hand,

who gave reasonable answers, and who spoke quickly and clearly,

were valuable. Those who were less focused, less accurate, and had

trouble speaking were worthless, and in some cases not even

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8 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO

tolerated. Students openly made derogatory comments and inappropriate

facial expressions towards other students.

In addition, the expectancy rule was in effect. Students responded

to fellow students’ expectations and behaved in the fashion

in which they were perceived. Students who were smart by their

peers’ standards continued to perform well in class, and students

who were less acceptable, performed poorly.

I could see the strengths and weaknesses of every student within

my classes, seeing in each something worth valuing. But they

couldn’t see this value in each other, sometimes not even see this

value in themselves. As the professor, I observed their behaviors in

the classroom, read their academic journals, and talked to them

individually. I was, therefore, exposed to their work, their thoughts,

their feelings. I could appreciate and recognize the contribution each

student could make to society.

Since my goals were to encourage students to learn and respect

themselves and others, I would need to find a way to provide

knowledge of self and others to all students. I was sure this would

raise the level of respect as students came to know each other and

see in each something worth valuing.

My initiation of cooperative learning in the classroom, therefore,

stemmed from the educational shortcomings of my own classes—the

absence of a mutual respect that included an appreciation for each

other’s contribution to society.

At the conclusion of my first semester of teaching, I determined

that second semester would be different. I turned to the literature on

cooperative learning and found three common areas of concern:

group formation, group composition, and assessment of student

work. Using that information, I began experimenting with cooperative

learning groups.2

*Group Formation*

Group formation refers to the number of students in each group,

the assignment of students to each group, and the length of time

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THE NEA HIGHER EDUCATION JOURNAL 9

/prod/ta/W94D doc:W94 12/19/93 REPRO

groups stay together. Aronson, Blaney, Stephan, Sikes, and Snapp

(1978) believe that groups can consist of three to seven members,

with five to six being the ideal. Johnson, Johnson, and Smith (1991a,

1991b) suggest that groups consist of two to four members. They

further suggest that the professor assign students to groups or use

random assignment.

If students select their own group members, they recommend a

modified student selection process be used. Students may list the

people they want to work with, but the professor arranges groups so

that students are placed in a group with one person they have

selected and others that the professor has selected. Groups should

stay together long enough for students to be productive, but every

student in the class should have the opportunity to work with every

other student sometime during the semester.

For several semesters, students in my courses were assigned to

groups either randomly or by matching people according to abilities,

both intellectual and interpersonal. During other semesters, students

assigned themselves either by choosing a topic or by choosing

the students with whom they wanted to work. The size of groups in

my classes has always ranged from three to five students and,

presently, I use a variety of assignment methods during one

semester.

I begin the semester by allowing students to choose their own

group members for work that is introductory to course content.

During the second or third week I begin using random assignment.

Depending on classroom dynamics, students work together to

complete one, two, or more tasks, work that is topical in content. For

example, students may stay in the same group to complete

assignments related to families and gender roles or learning and

memory, but then group membership would change for the next

topic or topics. I strive to complete a series of assignments for two

topics, but often find it counterproductive to remain focused on the

selection process of the group and not the needs of the class.

One semester, for example, students in one developmental

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10 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO

psychology course worked well when assigned to groups randomly

and completed two sets of topical tasks. Yet students in another

developmental psychology course were not productive using that

same design.

In the second case, students had the opportunity of working with

every other classmate via random assignment for the completion of

one set of tasks. They worked the rest of the semester in stable

groups and with members of their choosing.

Producing quality work is my expectation of students, but often

students cannot develop—in one semester—the skills needed to

work productively with a range of other people.

*Group Composition*

I also pay attention to *group composition*. Group composition

refers to the make up of the group in terms of skill levels, gender,

race, and personality traits. Both Aronson et al. (1978) and Johnson,

Johnson, and Smith (1991a, 1992b) believe that a diverse group

membership is most productive. During the semesters that I

assigned students to groups by matching abilities, I observed the

productiveness of diverse skill levels and personalities within each

group.

I found that matching students by intellectual and interpersonal

abilities drew more attention to those areas of strengths and

weaknesses in students and was ineffective. I tried, for instance, to

arrange group membership so that males and females were

balanced, or groups were either predominately male or female, or

were all male or female. I found that individual student characteristics

were more influential than gender in producing quality work. I

am only now becoming aware of the impact of ethnic diversity within

group membership. I am observing students in intraracial as well as

interracial groups.

I rely on random assignment to produce effective group membership,

but I will interfere with the process occasionally. If random

assignment hasn’t brought people together who may benefit from

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THE NEA HIGHER EDUCATION JOURNAL 11

/prod/ta/W94D doc:W94 12/19/93 REPRO

working with each other, I will arrange groups for that purpose. Or if

I notice that unhealthy dynamics are interfering with a group’s

productiveness, I may also arrange groups.

*Running Interference: Two Examples*

Debbie was a young wife and mother living in a four-room

apartment with her husband, daughter, parents, and sister. Her

home environment was hostile towards her role as a student and her

potential as a woman. Her confidence and self-esteem were very low.

Alice was a middle-aged woman who had worked hard to rear a

family. She was a nurse’s aide in a prison hospital. She was pursuing

a career change and was excited about her future. She was

self-assured. I arranged groups so that Alice and Debbie worked

together, believing that Alice would be an appropriate role model for

Debbie.

Ted, a clever manipulator, intimidated other group members

into always accepting his point of view. Very subtlety and without

dominating, he managed to convince the others by dazzling them

with his academic lingo that he was more intelligent and, therefore,

knew what he was talking about. Regardless of the assignment, his

work was accepted as the group’s. Most often, he was wrong. Ted was

assigned to several groups, exposing him to a range of interpersonal

situations. When he could control, he did; when he could not, he

complained that he could not help the others either grow personally

or produce quality work. Unwilling to acknowledge the value of

other people’s work, he eventually stopped attending classes and did

not complete the course.

*Assessment of Student Work*

This area seems to produce the most confusion among my

colleagues. It is no wonder, given the range of descriptions one finds

in the literature. Johnson, Johnson, and Smith (1991a, 1991b)

believe in individual accountability. Students are held responsible

for learning the material themselves and then helping others learn.

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12 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO

Aronson et al. (1978) believe in individual testing. Kagan (1989/90;

cited in Brandt, 1989/90) and Slavin (1989/90) discuss the benefits of

group goals and individual accountability.

Group goals or positive interdependence require group members

to work together for rewards based on group success. One measure of

group success could be the total of individual group members’ test

scores. McDougall and Gimple (1985) also refer to group rewards.

But Jackson (1986) refers to group grades.

The discussion here raises the question of individual versus

group grades for the novice cooperative learning professor. And, does

the type of work students do influence whether they receive an

individual or group grade?

To help answer these questions, I have also experimented with

the type of work done by each group and the evaluation of that work.

Group work has included class presentations, group tests, applying

concepts to a given situation, and group-to-group presentations.

Assessment of student work has included grades that were based on

an individual’s work and grades that were based on the group’s

work.

Students in my introductory psychology courses, for example,

have worked in groups both in and out of class to prepare a class

presentation on a psychological disorder. The assignment remained

the same for three semesters, but the grading changed from an

individual grade, to a group grade, to a combination of both.

Presently, students receive only individual grades for the work they

do in my courses.

Some students are not able to commit to group work on a

consistent basis and in such a way that would make group grades

equitable. These students are either incapable of such total commitment

or their personal lives interfere with the responsibilities of

being a student. It is not uncommon for students to be called away

from their school work because of their own job commitments, family

responsibilities, or personal dilemmas.

In all my classes, however, course requirements are built on

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THE NEA HIGHER EDUCATION JOURNAL 13

/prod/ta/W94D doc:W94 12/19/93 REPRO

interdependence and individual accountability. Class participation

grades are based on attendance, individual preparedness, and the

degree of cooperation, which includes helping others learn the

material for the course.

Journal work is a record of the individual’s learning process, but

is enhanced by the work of classmates. Final exams in developmental

psychology courses are comprehensive and reflect the work of the

entire class throughout the semester. Final exams in introductory

psychology courses are self-evaluative but include an assessment of

the student’s ability to work with others. Individual competency is

achieved, therefore, through cooperation and collaboration.

The type of work done by groups depends on the type of group to

which students in my classes belong. There are now two types of

groups in my classes: cooperative learning groups and collaborative

learning groups. I often hear colleagues use these terms interchangeably,

but I recognize two very major distinctions in the type of

work each group does and the resources each group uses.

**Cooperative Learning Groups**

Cooperative learning groups take their direction from and use

sources provided by the professor. Because I recognize cooperative

work as a precursor to collaborative work, students in my introductory

level courses are exposed to cooperative group work.

*From theory to practice*—The direction takes the form of

established questions to direct student discussions and established

activities that require students to apply concepts. Sources include

only the textbook or materials prepared by the professor.

For example, before a lecture on psychobiological processes,

students are presented with the question: Do you believe psychologists

should be concerned with the nervous system?

Students are expected to justify their position and be specific in

their rationale. They prepare for their small group discussions

before class by critically reading their textbooks and developing

***There are now two very distinctive***

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***collaborative learning groups.***

14 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO

their own arguments. They bring those arguments to class and,

using each person’s work, they develop a group position to present to

the class. These presentations become the basis for the class lecture

and discussion.

*Taking notes*—The natural response of students in classrooms

not cooperatively based is to take notes only when the professor

speaks and outlines salient points. In my classes, students are

instructed to take notes when each other presents but to leave plenty

of ‘‘white space’’ in their notebooks.

I take notes as well, recording mine on the blackboard. The white

space in student notebooks is later filled with additional points,

clarifications, or implications derived from the whole class discussion.

Students take peer presentations very seriously. They are told

from the beginning of the semester that what anyone says in class is

as important as what I say. If they aren’t quite convinced, they

realize this soon enough when I do not repeat what students have

presented, yet hold the class accountable for that information

through testing.

*Lectures*—Cooperative learning groups may also function after a

lecture. Following a lecture on classical conditioning, students are

given the group task of identifying the elements of classical

conditioning in a variety of situations presented to them on an

activity sheet. For example, students are asked to identify the

neutral stimulus (ns), unconditioned stimulus (ucs), unconditioned

response (ucr), conditioned stimulus (cs), and conditioned response

(cr) in the following situation:

Two-year-old Andrew is in his playpen in front of a big

picture window. A thunder and lightning storm is brewing

outside. A bolt of lightning flashes across the window,

followed by a loud thunder clap. Andrew jumps at the

noise. This continues for quite some time and then stops.

As the storm moves away, a bolt of lightning flashes again.

Andrews sees the flash and jumps.

***What anyone says in class is as***

***important as what I say. I hold***

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THE NEA HIGHER EDUCATION JOURNAL 15

/prod/ta/W94D doc:W94 12/19/93 REPRO

Students quickly move into groups perceiving this as a fun

activity. They are surprised at how difficult it is to actually apply the

information they have just heard in the lecture. Among them,

though, they arrive at the solution:

ns = lightning, ucs = thunderclap, ucr = jump,

cs = lightning, cr = jump

Cooperative learning classes take their direction and receive

sources from the professor, as opposed to collaborative learning

groups, which provide their own direction and sources. These

students are working on a higher cognitive level.

*Students set the topics*—Students in my developmental psychology

classes work collaboratively and begin initially by setting the

priority for topics to be covered during the semester. During the first

class, each student is given 100 points to spend before the next class.

Using the table of contents in their textbook, they assign points to

those topics they wish to study. I compile the results and give

students the course outline and reading assignments at the third

class.

As each topic comes up in class, students work in small groups

brainstorming questions they have about the topic. Each group

develops at least three questions that are then written on the

blackboard. In an adulthood and old age class, for example, a group

raised the following questions under the topic of families:Do children of divorced parents tend to get divorced themselves?

What are the effects on children reared in gay or lesbian

families?In choosing a mate, is it better to pick one who is similar or

opposite?Do people consciously or unconsciously choose someone who is

similar or different than their opposite sex parent?Do couples who marry later in life and get to know each other

before the marriage stay married longer than couples who

marry young?

***Cooperative learning classes take***

***their direction from the professor;***

***collaborative learning groups***

***provide their own direction.***

16 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO

Once students have listed the group questions on the board, we

categorize them. These questions, along with questions from the

other groups in class, were categorized into:choosing a mate,marriage,gay, and lesbian relationships, andmarriage and divorce.

Each group then chooses a category to investigate and which

questions will direct the group’s work.

Students work with their small groups to prepare for the whole

class discussion on each topic. Preparation involves planning the

coverage of the topic, developing strategies for each group member’s

work, researching a variety of sources, and putting together a

presentation for the whole class discussion.

*Resources*—Sources include scholarly journal articles, textbook

readings, and monographs. Media stories or pamphlets from legitimate

agencies such as pamphlets on menopause or child abuse may

be used to provide examples in support of group findings. Periodicals

such as *Psychology Today*, *Newsweek*, or *Time* are not considered

scholarly sources.

The textbook is treated as a resource and not a definitive text.

Students are involved with their text by using the index to look for

information that they can read or access on their chosen topic. The

value of using a textbook as a resource is that students learn to think

for themselves and understand that textbooks usually represent a

singular point of view.

I work right along with my students. I choose a topic to

investigate, do research in the library, and present my findings to

the class. I work with students in and out of class, although my

out-of-class sessions are not scheduled. I often see students when I

am working in the library.

One day, three of us converged in the same aisle looking for the

same journal and article. We had all used the Infotrac computer for

our search and had very similar printouts of possible sources. The

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THE NEA HIGHER EDUCATION JOURNAL 17

/prod/ta/W94D doc:W94 12/19/93 REPRO

journal we were all looking for was missing from the shelves.

In response to their complaints of not being able to find any of

the material in the library, I ran through the drill: Did you check

with the reference librarian? Did you check the re-shelving carts?

Did you walk around to see if anyone was using it? Did you check to

see if it was on microfilm?

Having given them some direction, we divided the remaining list

of sources and went searching again. We met half an hour later and

between us had all of the articles we wanted. At the very least, when

I see students in the library, we compare notes and offer each other

help. I notice a difference in students’ attitude and participation in

class after I have met them in the library. They are more open,

interested, and committed to the collaborative process.

*Thorough involvement*—During class, I visit every group, engage

in small group discussions, listen to students talk about their

process, and offer suggestions to help facilitate their work. I also

share resources and offer other perspectives they might want to

consider. The level of interaction with those groups working on the

same topic as I is somewhat more intense.

Students seem more willing to include me in their discussions

because we are both dealing with the same material. Our discussions

are more substantial. Because of this higher level of academic

discourse, I choose my topics to investigate according to which

students I need to work with in this way. By working with students

in the library and in class, I believe I both instruct in and model the

behaviors of critical scholarship.

*Testing*—The questions that direct our work set the foundation

for class discussions and become questions on essay tests. The

students and I sit in a large circle and listen critically to each other’s

presentations. We take our own notes and challenge points that

seem unreasonable. It is not uncommon, for example, for anyone to

challenge the findings of a research study based on the date or

design of the study.

It is also not uncommon for us to challenge each other’s point of

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18 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO

view using data to support our position. In fact, students challenge

much more freely than I do. Bringing whole class discussions to a

conclusion involves agreeing on which information we accept as

course content and are thereby responsible for knowing.

**Where Did It All Begin?**

All of the cooperative and collaborative behaviors described here

grew out of my research in the literature and my own field

experimentation. But I was also influenced by the work of Freire

(1970) and Sizer (1984, 1992), whose theoretical positions seem most

useful to those professors considering cooperative and collaborative

learning.

I realized that my goals of encouraging students to learn and

respect others called for transforming their world, their reality. In

order to do this, students had to engage in what Freire calls a

dialogical education for ‘‘without dialogue there is no communication

and without communication there can be no true education’’ (p. 81).

The dialogue of education in the college classroom begins when

the themes of the content reflect those realities that students want

to know more about. Once presented with these themes, professor

and students—acting as co-investigators—can explore their realities

and share their views.

The educational reform work of Ted Sizer (1984, 1992), whose

Coalition of Essential School’s philosophy, while outlined for high

schools and used in middle schools, can easily be adapted to the

college classroom. Sizer argues that students need to use their minds

well, need to learn how to gather their own information with the

help of their teachers, and need to learn less superficial information

in favor of acquiring a more in-depth knowledge. He also argues, as

does Freire (1970), that every student has the right to learn and

learn well and has the responsibility to produce authentic work.

Such an education, according to Sizer, begins with the development

of essential questions that guide student work and invite

***The dialogue of education begins***

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THE NEA HIGHER EDUCATION JOURNAL 19

/prod/ta/W94D doc:W94 12/19/93 REPRO

dialogue. His colleague, Grant Wiggins (1987, 1991), provides a

practical model for this theoretical framework. He offers a design for

the questioning process that promotes critical thinking, but more

importantly, he articulates the criteria for authentic work. Student

work is authentic when it is purposeful, gratifying and fulfilling,

challenging, meaningful, engaging, and generative.

**The Key: Healthy Group Dynamics**

Theory and practical models aside, putting students together to

work on a common assignment does not guarantee that cooperative

learning will occur. Cooperative learning is dependent on interdependence—

the ability to work well together, using each other’s

strengths and weaknesses in a complimentary manner that gets the

job done at maximum potential.

The success of a group’s work is contingent, therefore, upon a

healthy interaction between students. David W. Johnson and his

colleagues (1990, 1991, 1991a, 1991b) provide group dynamic

formats that set the tone for productive, authentic work.

A healthy interaction begins with an awareness of the social

skills needed for successful cooperative work: leadership, shared

decisionmaking, trust, effective communication, and conflict management.

These skills are developed through the use of warm-up

exercises, social tasks, group roles, and the processing of group work

once the assignment is complete (Johnson, Johnson, and Smith,

1991a, 1991b).

Warm-up exercises are directed towards the whole class during

the first week of the semester. I explain to students that the course

structure of group work requires us to know each other enough to

work well together and warm-ups help ‘‘break the ice.’’ Depending on

the exercise, we will spend five to 20 minutes at the beginning of the

first two, maybe three classes of the semester.

A favorite exercise of mine and the students is the ‘‘ethnic line

activity.’’ The students and I form a line, standing across the room.

***A healthy interaction begins with***

***an awareness of the social skills***

***needed for successful cooperative***

***work like shared decisionmaking.***

20 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO

We do this four times lining up in alphabetical order according to the

ethnic heritage of each of our maternal and paternal grandparents

with whom we have either a familial or legal bond. I ask a student to

save my place in line, and I record the countries on the board as we

sound off. I prepare a handout with this information and pass it out

at the next class. The last two times we sound off, I ask students to

state their name—first, then first and last, before they state the

country of origin.

These activities help build community both in and outside the

classroom. Recently, one student told me that, as a third semester

student at the college she met more people during the first week of

that class, than during her two previous semesters combined. As a

result, she felt more comfortable and more connected to the college.

In class, I notice that students are relaxed and freely engage in small

group work.

The assignment of a social task at the beginning of each group

session further breaks down the barriers between students. Social

tasks range from introducing each other by name, the meaning of

their names, or a memory cue that helps others remember their

names to a sharing of their academic strengths, academic weaknesses,

or style of conflict management.

By learning more about each other, students find a common

ground that gives them something to identify with and connect with

in each other. Students frequently refer to the social tasks as the

‘‘bonding’’ process. Many times, when I have noticed students

spending more time than I would like on the given social task and

encouraged them to move on to the academic portion of their work, I

have been met with the comment, ‘‘But we are still bonding.’’

Whether students are serious or not when they refer to their

bonding, they recognize its value. This familiarity through selfdisclosure

transcends the stereotypical first impression that students

have of each other and helps them to begin to recognize each

other’s limitations and potential. I find that this knowledge leads to

an appreciation and acceptance of the other. This familiarity also

***Student familiarity through selfdisclosure***

***transcends the stereotypical***

***first impression that***

***students have of each other.***

THE NEA HIGHER EDUCATION JOURNAL 21

/prod/ta/W94D doc:W94 12/19/93 REPRO

induces students to accept more responsibility for their contributions

to the group.

*Assigning Roles*

Appropriate social skills are further developed through the use of

group roles during the small group session. Besides the academic

task, each student takes on added responsibilities. Johnson,

Johnson, and Smith (1991a, 1991b) suggest a number of group roles

that create social interdependence among students. Table I contains

the roles used in my classes.

The use of group roles encourages equal participation of group

members where everyone has the opportunity to participate without

one person dominating. Equal participation may not occur, but the

structure is there, and, as a result, students recognize that everyone

has valuable contributions to make to the group, which, in turn,

helps it run efficiently and effectively.

Students choose roles among themselves but are encouraged to

take a turn at each role throughout the semester. When I check in

with each group, I ask who is functioning in which role. Frequently,

I will also ask which roles each student has taken on so far in the

semester and make a note of those students who need to move on to

other roles. The next time group roles are chosen, I will remind those

students of what roles they need to try.

**TABLE 1.**

**Group Roles**

RECORDER Takes notes during the group discussion and

compiles a presentation for the whole class.

REPORTER Presents the group information to the class.

CHECKER Monitors the group members’ understanding of

the topic under discussion and stops the group

work for clarification when someone is confused.

ENCOURAGER Ensures that everyone has the opportunity to

participate in the group’s work and priases

members for their contributions.

OBSERVER Monitors and records the overall behaviors of the

group according to an agreed upon checklist of

behaviors.

22 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO

Developing appropriate social skills continues even after the

group work is finished through the processing of group work for

evaluation purposes. The same format is used for small groups and

whole class discussions. Following Johnson, Johnson, and Smith’s

(1991a, 1991b) model, students are asked to list three things they

found helpful and one thing they would like to see improved.

Students are encouraged to look at the behaviors of others, not

personalities, in an effort to identify those specific behaviors that

facilitate group work and those that hinder it. This information is

then shared with either the small group or the whole class.

Students are encouraged to be constructive and communicate

with each other appropriately by using language that is nonthreatening

and nondefensive. In other words, students are instructed

to describe a behavior rather than judge it, to remove the

words ‘‘you should’’ from their vocabulary and replace with ‘‘could

you’’ or ‘‘you might,’’ and to take responsibility for their thoughts and

feelings by using the word ‘‘I’’ instead of ‘‘we,’’ ‘‘you,’’ or ‘‘they.’’

A typical group member’s feedback might look like this:

*Helpful*:I find it very helpful that Sarah comes with several articles

because it improves our discussion by increasing our pool of

resources.I like the way Mary records our comments. She says just what

I want to say but says things better than I could.I feel stimulated the way we discuss a point back and forth. It

really makes me think.

*To be improved*:I get frustrated when everyone doesn’t come prepared.

Sharing in small groups occurs in a round-robin fashion.

Students go around the group and each one reads that individual’s

list. After all the lists have been read, students are free to engage in

a discussion.

The presentation of the three helpful behaviors results in

positive, reinforcing statements that offset any defensiveness that

***Students are encouraged to look***

***at the behaviors of others, not***

***personalities, and to identify***

***those that facilitate group work.***

THE NEA HIGHER EDUCATION JOURNAL 23

/prod/ta/W94D doc:W94 12/19/93 REPRO

could be associated with the need-for-improvement statement.

Because of this, discussions have been friendly and respectful.

Students tend to recognize and own their behaviors without further

discussion from the other group members.

The mechanics of processing group work in whole class discussions

occurs somewhat differently. Students are asked to turn in

lists of three helpful behaviors and one improvement. Before the

next class, I compile the information and share it in a whole class

discussion. I usually separate the suggestions for improvement into

two groups—behaviors for which I am responsible and behaviors for

which students are responsible.

Feedback from one class included the following:

*To be improved by the professor*:Facilitate the group more effectively. Be sure that everyone

who wants to speak has the opportunity, but do not allow

discussions to drag on.

*To be improved by the students*:Be better prepared to speak so the time is used more

efficiently.

**It’s Almost Perfect**

Student feedback from both introductory and developmental

psychology courses has been extremely positive. I obtain feedback on

the course structure directly by asking students to evaluate the

small group work using the above format. I receive indirect feedback

by periodically asking students to anonymously respond in writing

to the question: ‘‘What is the most significant learning that has

occurred as a result of this course?’’

In both cases, students report that they learn more information

and learn it better, that their own perspective broadens because they

have the opportunity of hearing others’ points of view, which forced

them to rethink their own, that they learn how to work with others,

and they learn to respect others. Students in the collaborative

***I obtain feedback on the course***

***structure directly by asking***

***students to evaluate the small***

***group work using this format.***

24 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO

learning groups additionally report that they learn how to use

libraries, do research, interpret primary sources, and question

nonprimary sources.

*Race Relations Improve*

Johnson, Johnson, and Smith (1991a, 1991b), Kagan (cited in

Brandt, 1989/90), and Slavin (1989/90) have found that group work

also improves self-esteem, interpersonal relationships, and race

relations. I agree.

Cooperative and collaborative learning provide a format for

dealing with diversity, both in terms of a multicultural curriculum

and student skill levels. As students begin to feel safe in a classroom

environment that is respectful, their questioning process becomes

more open and honest.

Confronted for the first time perhaps with lifestyles other than

their own and influenced by the media’s coverage of society, students

express interest in African-American, Hispanic, gay/lesbian concerns,

and others. In cooperative learning classes, I respond to these

interests by helping students access the information they are looking

for. Students in collaborative learning classes respond to these

interests by introducing studies on their particular concern or

concerns into the course content via their small group investigations

and presentations during whole class discussions.

Studying course content, hearing other students’ perspectives,

and getting to know students of diverse backgrounds while working

with them influences attitudinal changes. Students also recognize in

themselves and others their strengths and weaknesses and how

these complement the working of a group. Students then report a

change in attitude towards themselves, people of varying skill levels,

people of color, gays and lesbians, and people of all ages.

*Tolerance Increases*

Influenced by these attitudinal changes, students have also

reported a change in their behaviors. They report being more

***This provides a format for dealing***

***with diversity, both in terms of a***

***multicultural curriculum and***

***student skill levels.***

THE NEA HIGHER EDUCATION JOURNAL 25

/prod/ta/W94D doc:W94 12/19/93 REPRO

accepting and respectful. These behaviors are noticeable in the

classroom and in student conversations. These changes will help

students live more productive, useful, and healthy lives in the

workplace, but also in their families, neighborhoods, and communities.

Learning to respect others is a function of both a student’s

academic learning situation and the respect students feel from their

professors. This influence is noticeable in the unsolicited letters

often received from students at the end of a semester.

The following excerpt from one such letter reflects the recognition

of mutual respect:

Your teaching methods are refreshingly innovative, and I

appreciate your obvious dedication to your students. It is

really nice to feel respected by a professor, and I have a

great deal of respect for you in turn.

Students demonstrate a high level of interest in the cooperative

and collaborative course structure. Despite the above average

demands on students to produce quality work, an average of 75

percent of the students who begin my courses complete them. Those

students who drop the course report that they do so because of the

workload and not because of the requirements of group work.

*Grades Improve*

Student success can be measured from student self-reports, both

solicited and unsolicited, plus their grades. Students in cooperative

and collaborative learning courses experience a higher rate of above

average grades. The percent of students in my courses receiving a

grade of ‘‘B’’ or better has risen from an average of 60 percent to 85

percent for those students who complete the course. This scholastic

success seems to be due to the ownership students share in the

course content.

The material is covered in a way that is meaningful and useful to

students, their work is authentic. These grades do not reflect simple

grade inflation. A comparison of my syllabi indicates that students

***Learning to respect others is a***

***function of a student’s academic***

***situation and the respect students***

***feel from their professors.***

26 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO

are doing more work, being challenged more intellectually than

students in my earlier classes, yet earning higher grades. In

addition, students report that the skills they learn in my courses

help them to be more successful in their other courses regardless of

that course’s structure.

*A Lot of Hard Work*

As rewarding and successful as group work is, facilitating group

work can be very difficult. It is tedious work to visit each group,

explaining and re-explaining the tasks at hand, reminding students

of their roles, modeling those roles when necessary, and prodding

everyone along.

It is also time- and energy-consuming to be involved in reflective

teaching, with its constant need for observation, interaction, and

analysis of student progress, the classroom environment, and my

own behaviors. Yet this is a crucial element in both the cooperative

and collaborative learning structures because what works with one

class or one student may not work with everyone. Often the energy

consumed by reflective teaching and the flexibility required to

produce a successful learning situation precludes implementing, in

each course every semester, all of the social skill processes.

During a recent semester, for example, one class did not evaluate

small group work at all or follow through consistently in group roles.

I was not concerned, however, as these students, having been

exposed to the process of group work, were closer to developing the

necessary cooperative skills than they were before.

*Tackling the Unknown*

The most frustrating aspect of cooperative or collaborative work,

however, is moving students from the familiar product-oriented

education to the unfamiliar process approach to education. Students

involved in collaborative learning groups have a difficult time at

first accepting the notion of providing their own information for the

course, providing the ‘‘meat’’ of the course, as they have called it.

***Students have a difficult time at***

***first accepting the notion of***

***providing their own information***

***for the ‘‘meat’’ of the course.***

THE NEA HIGHER EDUCATION JOURNAL 27

/prod/ta/W94D doc:W94 12/19/93 REPRO

Some students also have difficulty accepting the effectiveness, on

a continuous basis, of the three social skill processes: social tasks,

group roles, and the processing of group work. These students

believe that knowing about group process and experiencing it once is

enough. They do not realize that they could be more productive if

they improved their group effectiveness and that improving group

effectiveness takes time and practice in developing the appropriate

relationships and social skills.

*Re-envisioning Content*

Finally, facilitating group work is difficult because it takes time

away from course content, although learning the process is part of

the content. Given the short amount of time and the amount of

material that is expected to be covered in any given semester,

however, I am always faced with the tension of balancing group work

with content.

I have come though to two conclusions: less really is more and

the time involved in developing appropriate relationships and social

skills is time well-spent. Students may cover less topical material

but cover it more in-depth. They are, in fact, covering far more

material than would normally be anticipated, and they are able to

make connections between topics.

I have noticed, for example, that class discussions in my courses

have moved from static, segregated topical discussions to broadranging,

all-encompassing discussions that flow more smoothly and

represent the students’ ability to make connections and synthesize

ideas. When students develop the appropriate working relationships,

they work more efficiently and are more productive.

**Try It, You Might Like It!**

My use of cooperative and collaborative learning may not be

appropriate for everyone, but it at least provides an experiential

model for some. Because professors are so involved in the learning

***Less really is more and the time***

***involved in developing appropriate***

***relationships and social skills***

***is time well-spent.***

28 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO

process of their students when engaged in cooperative or collaborative

learning, it is critical to follow a design that is comfortable and

works for the individual. The best way to know what works for you is

to experiment with cooperative or collaborative learning techniques

in your own classes. Read the literature, gather your own data, and

know that your students benefit from the process even if it is not

perfect.

Integrating these strategies into your courses may be easier if

they are introduced slowly, one course or one strategy at a time. I

would suggest any of David W. Johnson’s books as helpful resources

for those professors concerned with specific strategies. My courage to

develop course strategies inconsistent with the traditional approach

to education, however, came from Friere (1970).

Those engaged in this type of exploration will discover, as I did,

that their techniques evolve with ongoing investigations and

professional development. Regardless of the techniques I employ, my

use of group work will continue to be fueled by the desire to have

students learn well and develop the mutual respect which is critical

within our society.n**Notes**

1 Slavin argues that student achievement improves through cooperative

learning only when two conditions are present: group goals are shared and

individual accountability is in place. He does, however, point out that while

research supports the influence of these conditions in elementary and

secondary schools, the work of Davidson (1985 cited in Slavin, 1989/90) and

Dansereau (1988, cited in Slavin 1989/90) indicates that they may not be

necessary at the college level.

2 Student self-reports and observations continue to generate data. Self-reports

of a structured interview format consist of the processing of group work

after a completed task, periodic and brief course evaluations throughout the

semester, and a more detailed course evaluation at the end of the semester.

I record naturalistic observations of the behaviors of interest during or after

class as the situation presents itself.

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30 THOUGHT & ACTION

/prod/ta/W94D doc:W94 12/19/93 REPRO