**WHY MORE TEACHERS DO NOT USE COLLABORATIVE LEARNING TECHNIQUES**

By Dr. Theodore Panitz

Considering the overwhelming number of benefits created by the use of collaborative learning methods, it is surprising that so few teachers use this paradigm. The cause lies in the current educational system which emphasizes content memorization and individual student performance through competition.

Few teachers or students have had any exposure to the CL teaching/learning technique. Teachers are not trained during their certification processes in collaborative methods and those that are often receive incomplete training. If teachers are taught by the lecture method while at teachers' college, then it is hardly surprising that this will be the method of choice when their turn arrives to take over the classroom. And the fact that most students have been exposed only to the competitive, individualistic approach used in our school systems today at all levels constitutes a major problem. Students are not likely to change their attitudes from one class to another unless they are trained in CL techniques. In order to gain a better understanding of the impediments to CL, we will separate for analysis those areas which effect teachers, administrators, parents and students.

**Reasons Why Teachers Resist Collaborative Learning Techniques**

LOSS OF CONTROL IN THE CLASSROOM
Perhaps the biggest impediment to CL lies in the fact that many teachers feel they give up control of the class if they give more responsibility to the students for their learning. When a teacher lectures she/he gets the feeling that the content is being covered, because it has been presented to the students in an orderly fashion. Many teachers provide lecture notes in an attempt to guarantee student coverage. Collaborative learning techniques encourage students to formulate their own constructs and ways of understanding the material. The constructivist ideology is foreign to most teachers who have been trained in the didactic method of lecturing.

LACK OF SELF CONFIDENCE BY TEACHERS
It takes a great deal of confidence in one's self and one's students to transfer the responsibility of learning to the student or even to share some of the responsibility. Many teachers lack the self confidence to try methods which may expose them to potentially difficult situations. These may occur when students ask unanticipated questions or act in socially unacceptable ways. CL redefines the role of teacher from expert to facilitator. The focus on the student reduces the opportunities teachers have to demonstrate their expertise and might call into question their teaching ability. He/she has to be sure he/she has something to offer, as a person, before a class can be allowed to take some control. Some people cannot face the risk.

There is also a fear of looking stupid. Teachers are defined as being experts in their fields, able to answer any and all questions. In a CL environment students may ask questions in a manner which is difficult for the teacher to understand. Sometimes it takes another class member to articulate a question or answer a fellow student's question using vocabulary which they can understand. Allowing and encouraging students to answer each other's questions is contrary to the typical teacher centered class. CL contradicts the concept that teachers are repositories of subject knowledge, whose role is simply to pour into the open, empty and willing minds of students their vast resevior of knowledge,

FEAR OF THE LOSS OF CONTENT COVERAGE
Teachers fear a loss in content when they use CL methods because group interactions often take longer than simple lectures. Students need time to accumulate enough information in order to be able to use it within their groups. They need time to work together to reach a consensus and/or formulate minority opinions for presentation to the whole class. A major function of CL involves teaching students how to work together effectively. Also, teachers superimpose onto CL their current experiences with the lecture method. For example, many students do not understand the material despite excellent presentations by the teacher and therefore perform poorly on content based tests. Teachers therefore conclude that the situation would be even worse if students work with other students who may be having similar problems. The reality is that when students become involved in their learning their performance rises.

Initially groups do work slowly as they learn how to function cooperatively, analyse what works and what doesn't work for their groups, and receive training in conflict resolution. But as students get used to the process, their level of retention and critical thinking increases to the point where they can move through the curriculum faster. If students started using CL at the elementary levels, less time would be needed for training at the secondary and college levels. Thus many of the concerns college teachers have about keeping up with their schedules would be addressed.

LACK OF PREPARED MATERIALS FOR USE IN CLASS
The use of CL techniques requires teachers to build a set of handouts which create interdependence among students and provides a basis and reason for their working together. Current textbooks generally offer a set of questions at the end of each chapter which are usually answered by students individually. A few publishers are beginning to tailor their texts to offer one or two questions which can be answered by groups, but supporting materials are not included. Teachers must develop worksheets, project descriptions and other appropriate materials. In addition, few suggestions are provided in the teacher manuals about how to institute group activities. For teachers who are new to CL, this is a major impediment. Teachers generally adhere to the methods and materials with which they are most familiar, since a major expenditure of effort and time is required to revamp curriculum materials.

TEACHERS' EGOS
Many teachers are wrapped up in their own self importance and enjoy being the center of attention. The class is their stage and it provides them with an opportunity to show off their knowledge and expertise. Lecturers do not trust students to learn. They think they must tell them what to learn and provide all the structure for the learning to take place. The egotistical side of teaching must be overcome in order for teachers to involve their students actively in the learning process.

LACK OF FAMILIARITY WITH ALTERNATE ASSESSMENT TECHNIQUES
Assessment is a major concern frequently expressed by teachers who are unfamiliar with CL. They presume that individual accountability will be lost or that one student will dominate the group or do all the work for the group. They are unfamiliar with how to assess group efforts and assign grades to groups. Often they assume that only one process is appropriate for assessing student performance.

CL as defined by Johnson and Johnson specifically calls for individual accountability as one of its five major components. Another one of the five elements is interdependence, which includes group grading and a reward system for group improvement. The two ideas are complimentary, not contradictory. Because teachers are not trained in alternate assessment techniques they naturally assume the worst, i.e., that the students will not be able to understand and deal with these testing procedures.

Techniques available for assessing groups include: teacher observations during group work; group grading for projects; students grading each other or evaluating the level of contribution made by each member to a team project; extra credit given when groups exceed their previous average or when individuals within a group exceed their previous performance by a specified amount; use of a mastery approach whereby students may retake tests after receiving extra help from their groups or the teacher; and the use of individual quizzes, exams or assignments.

Alternate assessment techniques provide an additional benefit in that teachers can build in reward systems for individual performance and group performance. These reward systems may consist of extra points toward a grade, certificates of achievement, extra time to work on special projects, class recognition for good group efforts or special recognition for work well done.

CONCERN WITH TEACHER EVALUATION AND PERSONAL ADVANCEMENT
The question of teacher evaluation is of great concern to many teachers who consider using collaborative learning techniques. In order for teachers to be properly evaluated the supervisor must understand the nature of this method and accept it as a teaching paradigm. If the department head is a propopnent of the lecture method of teaching then, his/her understanding of what he/she observes will be limited. This problem can be overcome by developing a process whereby the teacher and evaluator work closely together to review the class objectives and methods.

CL classes often appear to be chaotic since groups work differently than individuals. A noise level exists, even if muted, which is inconsistent with what takes place in a lecture class or with discussion formats. It takes a few moments to refocus the class when the teacher wishes to bring everyone together to go over the material, or make observations about what is going on in the groups. Groups sometimes digress from the topic at hand and need to be brought back to working on the task. Several students may request the teacher's attention simultaneously. To someone who is untrained in CL these activities may appear to represent ineffective teaching, which in turn may lead to a poor classroom evaluation.

STUDENTS' RESISTANCE TO COLLABORATIVE LEARNING TECHNIQUES
A cause for concern by teachers starting CL is the initial student reaction. Students have not been trained to cooperate in an academic environment. The primary approach in our schools is one of competition for grades and recognition. Teachers need to sell the concept of CL to the students by making clear what the objectives are and what the benefits will be. Until the students become comfortable with this new method, they will express concerns and doubts. Additionally, CL encourages student input on methodology. Not surprisingly, some of this feedback may be critical. Student criticism may be new to many teachers.

Students feel that the lecture method is "easier" because they are passive during the class while apparently receiving the necessary information. In contrast, interactive classes are very intense. The responsibility for learning is shifted to the student, thus raising the level of critical thinking by each student. This situation is both mentally and physically tiring. The students initially respond by complaining and lobbying for a return to the good old lecture days. For a new CL practitioner this can be very disconcerting. To the more experienced teacher, this is just part of the process all groups go through as they learn how to use CL techniques, and begin to see and appreciate its benefits as they move away from the comfortable paradigm of the lecture method.

Also, students may perceive the teacher as not doing his/her job. Collaborative classrooms are student centered whereas in typical classes teacher performance is seen as central to the class. In order to address this concern, teachers need to make clear to the students why they use a particular technique and what the outcomes will be from the activity. Another way for teachers to overcome this perception is to spend time with the groups or with individuals during the class. Teachers may walk around the class to observe groups interacting, make suggestions or ask leading questions in order to help facilitate the groups. The frequent emphasis upon and explanation of their roles in the CL process is a critical task teachers must do in order for their students to fully understand what they are observing.

LACK OF FAMILIARITY WITH CL TECHNIQUES AND CLASS MANAGEMENT
A number of perceived problems are associated with classroom procedures. Teachers are often concerned about the potential dominance by a few students or a few students doing all the work. These questions can be addressed by assigning roles to students and rotating the roles, allowing students to assign performance grades to each other anonymously and specifying what percent of the total assignment was completed by each member, and by the teacher observing each group and making suggestions for more equal participation. Group processing throughout the semester also helps address these issues. Questions about what to do with quicker class members and/or groups who finish a given assignment early can be resolved. Additional activities can be developed or a reward system can be created whereby students are allowed to socialize or work on other materials provided they do not disrupt the students who are still working.

Collaborative learning is difficult to sustain. As in any real life situation, repetition leads to boredom. (This is certainly true if one uses the lecture approach continuously.) A significant advantage to CL is the variety of classroom activities available to the experienced teacher. When adopting CL the teacher needs to learn the new techniques, practice them, introduce them into the classroom and work with the students to practice the new methods. Also, it is often necessary to convince the students of the benefits of working together. The fact that the responsibility for learning is being shifted to the students is hard for some students to adjust to.

Other problems: CL involves trial and error approaches. Not every activity works exactly as planned and constant modification is needed. Some activities work better with some groups than with others and classes react differently to each situation. In some institutions CL is seen as cheating because the educational pedagogy recognizes and rewards individual effort and competition and discourages cooperation among students. Also, students who are exposed to CL and have enjoyable experiences in a supportive educational environment have a difficult readjustment back to other classes where CL is not used.

If the institution has a perspective that says what is going on is material coverage instead of material mastery then the teachers will be less concerned about what students are learning and more concerned about including as much material as they can in a class period. Content versus learning centered classes are the primary focus of modern educational systems. In addition, thinking about learning primarily as a social interaction is a strange idea for most instructors, students and administrators, who expect to see the teacher controlling the class through lectures and/or teacher directed class discussion. Another potential problem arises for students who learn best by the auditory modality and who may be distracted by noise in the class. This problem can be addressed through student social skill development which identifies acceptable ways for students to talk and interact in class.

LACK OF TEACHER TRAINING IN COLLABORATIVE TEACHING METHODS
The current teacher training methodology does not foster CL. Teachers are not trained to facilitate groups, use brainstorming techniques, facilitate conflict management, or use group dynamics theory. They are trained to be good classroom managers with orderly students quietly listening to their lectures or doing their work individually. Many teachers do not know how or where to start using CL techniques in their classrooms.

Teachers are not trained to involve their students in the development of class procedures and assessment and are therefore not likely to accept constructive criticism from students. Also, teachers have trouble dealing with dissention in class by students who do not want to use CL methods. Convincing students that they are learning well or benefiting from this method is not always easy. Therefore, teachers need to be well grounded in the philosophy of CL and they must have opportunities to practice in a safe environment.

Collaborative learning skills need to be modelled to become effective, yet how many administrators run their schools or departments in a cooperative fashion? Very few meetings are run using collaborative techniques. It takes a great deal of effort to change what one is comfortable doing, especially if the same process has been used for many years. In order to move into CL teachers must rethink what they are doing in their classes and how they are accomplishing their goals. Most teachers have not seen group work in action so they have very few models to go by when trying to make changes.

Teachers generally reflect the teaching styles of their professors and in turn want their students to emulate themselves. There is a great deal of comfort in propogating the familiar. At the university level the preferred pedagogy is the lecture, thus there are few role models for future teachers who might be interested in using CL methods. Most professors are more concerned with doing research than with teaching. This situation is reflected in their teaching loads compared to graduate student research supervision. Except within some education departments, very little research goes on in support of good teaching practices. Within institutions there are very few role models to provide mentoring for teachers. In fact, teachers are often criticized by their peers when they do try to institute CL. Critical comments by teachers about room noise and student activity in the classroom are often used to discourage people from using CL techniques.

Because teachers receive little training in CL they are unaccustomed to what takes place in the CL class. One consequence is that they find it hard to believe that students can be learning the content material while they are socializing in their groups. Social learning is unique to CL and creates an enjoyable as well as interesting environment. This is not very surprising: human beings are social animals so any situation which encourages and enhances this basic instinct is bound to be deeply satisfying and enjoyable; learning in such instances is magnified, not diminished. Additionally, students' self esteem builds as they gain confidence in themselves and their peers, leading to additional enjoyment of the learning process. In real life situations people work, learn and socialize all at the same time. If we are to help our students move into social and employment situations, then we need to provide a model for them to follow which includes cooperation and team efforts, as well as individual efforts, in a social environment leading to the accomplishment of their task at hand.

Another consequence of the teacher's lack of familiarity with CL classes is the feeling of guilt which arises. Teachers do not feel they are teaching if they are not dispensing information. They may appear to be inactive since it is necessary to allow time for the groups to interact without teacher intervention. Even if teachers move around the classroom observing the students or talking to individuals or groups, in their minds they still do not fit the picture of a teacher. Students may comment on the fact that they do not see the teacher "teaching". It takes a high degree of confidence and training to overcome these personal feelings and to resist student pleas to move back to the lecture format.

LARGE CLASS SIZES AND INNAPPROPRIATE CLASSROOM SETUP
There is a growing trend in colleges to attempt to economize by increasing class size in lecture halls and increasing the number of TA led sections. This runs completely contrary to the nature of collaborative learning where smaller, student centered groups have access to the professor, who in turn serves as a facilitator, versus information giver. Fixed seating arrengements in large ampatheaters make it very difficult for students to interact comfortably. Collaborative learning is being practiced by experienced CL teachers in large lecture environments, however full collaboration is impossible under these conditions. Smaller classes which have tables that comforatbly seat 4-6 students or which can be rearranged to meet a variety of group configurations are needed to encourage new CL faculty to try group techniques. Even moveable chairs with writing tablets are preferable over fixed seats in a lecture hall setting. Smaller class sizes are critical to the establishment of collaborative learning in college courses.

**REASONS WHY ADMINISTRATORS LACK AN UNDERSTANDING OF COLLABORATIVE LEARNING TECHNIQUES AND PHILOSOPHY**

LACK OF TRAINING OR EXPOSURE TO COLLABORATIVE LEARNING
Many professors start their teaching careers with minimal training in teaching techniques. As they move into administrative positions they advance by starting at the department chair level, then moving up through the division dean position to dean and president. Advanced degrees focus on administrative areas instead of teaching. Theydo not receive training in CL as part of their teacher preparation processs and do not receive any CL training in their administrative Masters or Doctoral degree programs. Few administrators seek out information about CL through seminars or individual courses. Thus they maintain their primary focus on the traditional classroom where the teacher provides students with information via a lecture format and the students listen attentively and quietly. Adminmistrators who lack a well grounded understanding of CL tend to evaluate teachers who use it negatively and this in turn undermines the teachers attempts to initiate CL in their classes.

LACK OF FAMILIARITY WITH ALTERNATE STUDENT ASSESSMENT TECHNIQUES
As with teachers, administrators have not been trained in the alternative assessment techniques which are vital to collaborative learning. They continue to support the individual, competitive exam systems and discourage techniques which involve group grading. This problem is exacerbated by state assessment tests and the national SAT and Achievement exams which also emphasize individual performance and content mastery instead of process mastery. Grade point averages and class rank are emphasized in order to promote student acceptances into top colleges. Colleges themselves rely heavily on the standardized tests for admissions criteria. College courses are content oriented and competitively graded based upon class curves. Secondary school teachers and administrators attempt to provide classroom environments which model college classes in order to help their students succeed later.

**REASONS WHY STUDENTS RESIST COLLABORATIVE LEARNING**

STUDENTS' LACK OF FAMILIARITY WITH COLLABORATIVE TECHNIQUES
A major problem in implementing CL arises because students lack an understanding of the underlying philosophies of CL. Our current system encourages competition and individual responsibility and discourages student interaction. Understandibly, student resentment arises when they are asked to share information and study techniques or to help their peers. The superior students have figured out how to get good grades in a competitive situation and to share that information is a complete anathema. CL redefines the role of the student and the teacher and their interelationships by creating a nurturing environment versus a competitive one.

FEAR OF LOSS OF CONTENT AND ABILITY TO ACHIEVE HIGH GRADES
Students initially do not have a clear way of knowing if the work they are doing is correct. The process of student centered discovery and construction of their own knowledge base is new to most students. It is exactly this process that helps students develop critical thinking skills but they often resent the fact that group work shifts the burden of learning to themselves. They feel much more comfortable hearing the teacher present the important facts instead of having to sort out what is important. A common fear among students is that all the group members will be wrong, leading to failure.

The CL process calls for constant review and summary through whole class discussions and presentation of material by individuals and groups. In addition the teacher is continuously observing the groups and making suggestions about how to procede or where to go to find necessary information. Over time students become more comfortable with the process as they understand that their questions will be answered and that the teacher is an active participant in the process, taking on the role of facilitator or coach instead of expert information presenter.

**PARENT REACTIONS TO COLLABORATIVE LEARNING**

LACK OF PARENT UNDERSTANDING OF COLLABORATIVE LEARNING
Our society is not used to collaboration. It is used to authority and direction, particularly in the work place. Management trends such as TQM and CQI with quality teams are slowly being adopted by colleges as well as businesses. Until there is widespread use of teams in businesses and at colleges the parents of students will have little understanding of the collaborative process. Parents are not generally involved at the college level, however, at K-12 parents have a significant impact on the system and here they may impede the implementation of CL. Parents of upper level students often complain about their children being used as tutors or appearing to carry the load for a group. Students try to enlist their parents in a effort to discourage teachers from using CL, for all the reasons cited above. Parents rarely visit CL classes to observe first hand what is taking place, and teachers do not make enough of an effort to invite them into the process. As with teachers and administrators, parents are used to seeing a quiet classroom with the teacher in front lecturing. This is the pedagogy they were exposed to throughout their own education so they feel comfortable seeing the same approach.

Administrators often react to parent pressure and discourage attempts by teachers to introduce new pedagogies. They give lip service to the concept of active, hands on learning in groups, but in reality do not encourage adoption of these techniques. It will require a significant effort to educate parents as well as students about the benefits and procedures used in CL classrooms.

**POLICY ISSUES NEEDED FOR THE FULL IMPLEMENTATION OF COLLABORATIVE LEARNING IN CLASSES**

Policy #1) Support and encouragement must come from the highest policy making and financial boards and from the chief executive at the institution. Boards of trustees and presidents must embrace CL as a high system priority. They must be willing to provide the resources needed to implement CL in the form of training opportunities and materials. If possible the CEO should participate in administrative training sessions (see policy #7). The CEO must provide the leadership in order to create an environment supportive of CL.

Policy #2) Teachers must be involved from the start in planning for CL and throughout the process of implementing CL in their classes. Even though the initial impetus must come from the top levels of administration, the development work must be done by the teachers and department level administrators to guarantee its effectiveness.

Policy #3) Funding must be adequate to provide for training workshops, conferences, teacher presentations at conferences and in-house, release time for initial preparation, on-campus activities, materials for use in class and continuous training.

Policy #4) Textbook manufacturers must be involved in the conversion to CL by providing supplemental materials in the form of worksheets, handouts describing group activities, and faculty training materials. Eventually professors will develop materials unique to their courses; however, this process will take several years and an interim approach is needed. Publisher materials will also help model CL handouts for teachers who are just beginning to develop their own materials.

Policy #5) A support group mechanism must be developed and encouraged to involve teachers in the initial development process and in the initial training activities. Meeting times and facilities must be provided along with mentors to help the new groups function.

Policy #6) Teachers need to be encouraged to adopt CL in a risk free environment. The teacher evaluation process must be modified to take into account the different teaching methods used, and student testing through standardized tests must be re-evaluated. Alternative forms of assessment will have to be introduced and accepted in order to provide an accurate assessment of the outcomes of CL.

Policy #7) CL should be modelled in institutional decision making. Meetings should be facilitated in a CL manner. Few leaders appear willing to delegate the power to teachers which is needed to implement institutional change. If we desire teachers to delegate power to their students and give up the control afforded by lectures, then administrators must be willing to make the same changes. Teachers must be given the opportunity to work in collaborative versus competitive environments in order to reinforce the benefits of CL.

Policy #8) Administrators and supervisors should be trained in CL and group dynamics in order to be able to evaluate it and model it for the teachers. This goal can be accomplished through seminars, by observing experienced teachers, by taking courses in CL and through inservice training.

Policy #9) A CL library should be established within the institution and materials provided by teachers should be archived for use by other teachers. Funding must be provided for training materials, books, video tapes, journals, etc.

Policy #10) Students should be involved in the process through a student council, advisory group or committee assignments. The student leaders should receive training in CL also via workshops and in-school activities.

Policy #11) The general student population should receive training in conflict resolution, group dynamics and proper social behavior. This agenda could be accomplished outside of regular class time by bringing in experts and student trainers to work with student leaders and with groups of students. Teachers need to be trained in these techniques also. An institutional philosohpy of cooperation and conflict resolution must to be established.

policy #12) Teacher training colleges and universities must emphasize CL as the primary teaching paradigm and hire professors who can teach using CL methodology. Teachers will follow the same model they were taught by, which explains why the lecture method is predominant. CL must be modelled in every college class in order to establish this method in teachers' minds.

policy #13) Colleges must adopt CL as the primary learning method in order to encourage secondary and primary teachers to follow suit. Secondary teachers use the lecture format because they feel they must train their students to succeed at the college level.

policy #14) CL must be implemented at all education levels simultaneously. College professors bemoan the fact that students weren't trained in CL at the secondary level, high school teachers criticize junior high teachers, who in turn suggest that primary teachers need to start the process. This situation needs to be rectified by everyone's beginning to use CL so that eventually students will be trained from the very beginning of their education. We can't wait 12 years for the first class to go through the entire process in order for all students to be versed in CL when they reach college.

policy #15) Absolute grading instead of grading on a curve must be adopted by the institution and alternate forms of assessment (such as group grades and portfolios) must be encouraged. The bell curve grading system by its very nature fosters competition, restricts collaboration, and leads to anxiety among students. Within this system, if one student helps another, then he/she alters the bell curve and lowers his/her own grade. Absolute grading eliminates this threat. Higher standards are set in that every student who performs well can receive a top grade.

Policy #16) Curriculum planning and instruction must go hand in hand. "When a curricula is created, instruction must be considered, and when instruction is planned, curriculum materials must be appropriate for the mode of instruction."

Policy #17) Class size must be held to a minimum in order to facilitate student-student-teacher interactions on a daily basis. Funds must be provided for proper classroom furniture to meet the needs created by small group collaboration. Classes must be taught by professors who are trained in CL techniques not teaching assistants who are untrained in this paradigm. It might be possible to train TA's in CL teaching however the transient nature of this work force makes this approach doubtful.