Small-group learning in the community college classroom

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Community colleges — institutions that serve disproportionate numbers of poor, working-class, first-generation, non-traditional, and minority students — are uniquely positioned to provide liberating educational experiences to a diverse spectrum of society. Cross (2000) aptly describes the current interest in cooperative and/or collaborative learning with a metaphor: "a swelling river of interest…with four identifiable streams of thought" (pp. 5-6). These streams, undeniably grounded in changes in society, are the Stream of Belonging, the Stream of Career Preparation, the Stream of Deep Learning, and the Stream of Diversity. The article borrows Cross' metaphor to examine the need for and effectiveness of various small-group learning activities within community colleges. Finally, the authors discuss potential obstacles to implementation of these activities.

Introduction and review of literature

In *Pedagogy of the Oppressed*, Paulo Freire (1972) suggested that teachers should not lecture, but continually pose questions and encourage students to be researchers, co-investigators, and critical thinkers, thereby facilitating their personal and social liberation. Graduates of higher education who are literate, productive, and socially conscious best personify such emancipation. Students' holistic development involves the ability to choose freely and act independently of outside influences, as well as the ability to freely recognize dependence on and obligations to others (Cross, 1992).

Community colleges — institutions that serve disproportionate numbers of poor, working-class, first-generation, non-traditional, and minority stu-

dents—are uniquely positioned to provide liberating educational experiences across a diverse and inclusive spectrum of society. Due in large part to their founding mission and purpose, community colleges are especially interested in serving any group that has been underrepresented in higher education in the past (Cross, 2000). Additionally, these institutions are actively interested in workforce development and global connections.

Traditionally, the college professor has used—or perhaps worn out—the lecture method as a teaching tool that identifies him or her as sole arbiter of knowledge and students as passive recipients who must retain that knowledge (Cross, 1999; Stein & Hurd, 2000). Gardiner (1998), who reviewed and synthesized the research literature, found that "between 70 and 90 percent of professors use the traditional lecture as their primary instructional strategy" (p. 76).

Osborne, Browne, Shapiro, and Wagnor (2000) describe faculty sharing of classroom authority as "trading ownership for student success" (p. 128). For example, Cross (2002) has remarked that "discussion [as opposed to lecture only] is uniquely designed to encourage students to strengthen their intellectual muscle and practice their strategic moves. It can be a very powerful and useful teaching and learning strategy" (p. 8). As students move from spectators to active participants, they are able to speak the language of critical, academic discourse.

To matriculate as information-literate members of society, students need active engagement—that which transcends rote memorization and regurgitation of facts—and frequent and repeated opportunities to demonstrate capaciousness and comfort in using higher-order critical thinking skills. Hatfield and Hatfield (1995) proclaim that cooperative learning experiences are an important part of a student's intellectual and personal growth. Moreover, they contend that these learning experiences can have a profound impact on a learner's future and career.

Beyond simply meeting the needs of the labor market, small-group learning provides structured opportunities for students to interact with diverse learners from other racial/ethnic groups (Kagan, 1992). Increasingly diverse student populations, both in terms of culture and language, make cooperative learning an essential consideration for community colleges. As racial/ethnic diversity increases in institutions, faculty and learners inevitably face culture shock. Both need strategies that help them turn diversity into a positive force (Holt, Chips, & Wallace, 1991).

Freire's theory, although perceived by some as a radical means for liberating the underclass, posits a tool for educational betterment of all learners, minority and mainstream alike, who seek higher education at the community college.

Small-group learning methods

Small-group cooperative settings have demonstrated potential to foster student development of critical thinking skills in an inquiry-based learning environment (McKeachie, 1986). A non-exhaustive list of commonly used small-group learning methods includes the following:

- *Circles of Learning*—No more than six students complete specific, interdependent roles in a learning task (Johnson, Johnson, & Holubec, 1994).
- *The Group Investigation Method*—Similar to the Circles of Learning, the method gives greater freedom to group members in assigning specific tasks. Frequent group discussion is encouraged as the most significant (and time consuming) element of the method. After the group has completed its investigation, results are reported to the whole class (Sharan, 1990).
- *The Jigsaw Approach*—In small groups of similar size, each student is given a different learning task to uncover only part of the information needed for the full lesson. Student A from Group 1 then meets with students from other groups who have been given the same role. Within this "expert group," participants engage in research and discussion to become fully knowledgeable about the issue they have been assigned. After the "expert groups" have finished, each member returns to his or her original group and teaches what he or she has learned to allow the full lesson to be pieced together (Sharan, 1990).
- *The Learning Cell*—Dyads of students create questions to ask each other about a particular reading or learning task (McKeachie, 1999). Beyond simply asking and answering questions, students are encouraged to discuss and debate the issues raised.
- *Student Teams*—These teams, although used in many ways, typically involve a small group of peers who tutor one another on information. Then, teams compete in a "quiz show" (e.g., using *Jeopardy!* format).
- *The Facilitated Peer Group*—Students subdivide into small groups in which the teacher participates as both facilitator and peer. Activities within the groups vary from discussion of readings/issues, to peer review of student writing, to group investigation. In many ways, the approach is similar to a small-scale seminar, but with little or no lecturing. The approach allows for much greater student-teacher interaction, which has been shown to positively combat student dropout (Lau, 2003).

The present article unifies discussion of these, and other, cooperative and/or collaborative learning methods under the umbrella of small-group learning. However, for

purposes of definition, the preceding notes point out distinctions present in the scholarly literature between the small group techniques.

Cooperative learning vs. collaborative learning

Students can interact with one another in three basic ways: competitively, individually, and cooperatively (Johnson, Johnson & Smith, 1991). In a meta-analysis of the literature on cooperative learning methods, Johnson, Johnson, and Stanne (2000) report finding over 900 empirical studies that validate their effectiveness over competitive and individualized learning strategies.

Both the literature and faculty frequently use "cooperative learning" and "collaborative learning" synonymously and interchangeably and/or place cooperative learning in the more general category of collaborative learning (Garfield, 1993). Ravenscroft, Buckless, and Hassall (1999) assert, "There are perhaps almost as many definitions of 'cooperative learning' [and collaborative learning] as there are researchers writing on the topic," and Bruffee (1999) declares that substantial differences exist between these two small-group learning methodologies.

Cooperative learning methods

Among those scholars who are frequently cited as having contributed to the historical basis for cooperative learning are John Dewey, Kurt Lewin, Morton Deutsch (a student of Lewin), and David Johnson (a student of Deutsch) (Sherman, 1996; Stein & Hurd, 2000). Although a well-researched topic, cooperative learning is often relegated to the back burner as an instructional method. Johnson, Johnson, and Stanne (2000) describe the impact of cooperative learning on education as follows:

> In the past three decades, modern cooperative learning has become a widely used instructional procedure in preschool through graduate school levels, in all subject areas, in all aspects of instruction and learning, in non-traditional as well as traditional learning situations, and even in after-school and non-school education programs.

Cooperative learning usually involves formal structure, faculty involvement (potentially perceived as "intrusive"), and a culminating activity. When this learning strategy is employed, the faculty member assesses both student learning and the ability to engage in teamwork. Thus, Lyons, McIntosh, and Kysilka (2003) recommend that faculty use a grading or reward system that ensures both individual and team accountability.

Cooperative learning, due to its formal structure and clearly defined outcomes, generally requires basic recall or, at best, synthesis of facts. Even when analysis is sought, group consensus—rather than spirited intellectual debate—is often an accompanying objective of the assignment.

Collaborative learning methods

While cooperative learning asks students to produce those answers that the teacher seeks, collaborative learning asks them to actively engage in the teaching and learning process, to participate in informed and spirited debate, and, ultimately, to negotiate learning on a more balanced platform of disciplined inquiry with the teacher. Regarding such learning, Bruffee (1999) provides these insights:

> Collaborative learning assumes that students rebelling against the teacher or the task and questioning one another's views within a group are inevitable and necessary aspects of learning. . . . Collaborative learning also supposes that trying to account for disagreement and dissent—finding the underlying cause of what may be motivating a group member to disagree with the prevailing opinion—is a powerful educational tool. (p. 91)

Thus, in collaborative learning, faculty must "trust . . . students to govern themselves in a context of substantive engagement, conversation, and negotiation" (Bruffee, 1999, p. 89). Division of labor is formalized and assigned by students, not the faculty member. Moreover, faculty intervention is minimal, as students are expected to negotiate the creation of meaning and relationships within groups. Typically, faculty members may not be aware of the details of the group process, nor do they evaluate the group process, as much as they evaluate the group product deliverable.

In contemporary teaching and learning environments, the student's ability to develop ideas, refine thought processes, and think critically is a preeminent goal. Operationally, collaborative learning exercises support such a goal by encouraging debate, disagreement, and dissent, as well as by questioning authority. These exercises enlist the student's use of prior knowledge in unfamiliar applications and/or in constructing new knowledge.

Students may be asked, for example, to solve a problem for which there is no singularly "correct" answer (Lyons et al., 2003). Instead, the group is expected to develop new ideas whereby the standard of judgment is seldom absolute. Moreover, knowledge or learning is related to "the current consensus in the larger disciplinary or cultural group that the teacher belongs to and represents in the classroom" (Bruffee, 1999, p. 91).

A swelling river of interest

Cross (2000) aptly describes the current interest in cooperative and/or collaborative learning through metaphor: "a swelling river of interest . . . . with four identifiable streams of thought" (pp. 5-6). The streams, undeniably grounded in changes in society, are the Stream of Belonging, the Stream of Career Preparation, the Stream of Deep Learning, and the Stream of Diversity. The current article borrows

Cross's metaphor to examine the need for and effectiveness of various small-group learning activities within community colleges. The authors also discuss potential obstacles to greater integration and implementation of such activities in these institutions.

The Stream of Belonging

Numerous studies have found that small-group learning is positively correlated with increases in student academic performance, student self-esteem, and/or student self-concept (Box & Little, 2003). Students with increased self-concept demonstrate an increased motivation for learning, indicated by the decreased dropout rates among those who have engaged in courses featuring small-group learning (Tinto, 1987).

Aronson, Blaney, Rosenfield, Sikes, and Stephan (1977) indicate that students who participate only in small-group learning increase their self-esteem whereas those who participate only in traditional classroom settings experience decreases in self-esteem (as cited in Box & Little, 2003). The student-led interactions are reportedly more valuable than time spent on instructor-led activities, homework, or even relationships with faculty. Lyon (1993) indicates that those who improve in academic self-concept drastically improve their academic achievement.

Specific to content disciplines, Potthast (1999) reports that a student's confidence is a prime predictor of success in mathematics and statistics courses. Lundberg (2003) equates student success with opportunities to teach scientific concepts to others via collaborative groups. In the late 1950s, through the process of observing medical students, Abercrombie discovered that students who worked in groups to study and learn were able to make sounder and faster diagnoses than those who studied on their own:

> Students learn judgment best in groups, Abercrombie inferred, because they tend to talk one another out of their unshared biases and presuppositions. That is, the differences among them push them into socially justifying their beliefs or, failing that, into acknowledging their beliefs are socially unjustifiable and abandoning them. (Bruffee, 1999, p. 13)

Similarly, in a study of undergraduate music students, Bergee and Cecconi-Roberts (2002) found that the best way to counteract the tendency of students to evaluate themselves out of step with the perceptions of either their peers or faculty is to engage learners in small-group peer review exercises.

The Stream of Career Preparation

Both cooperative and collaborative learning result in increased interdependence, as well as improvements in the ability to work and communicate with others. Cooperative learning tends to codify and force these relationships, whereas collaborative learning allows for a more natural growth of these skills.

Stein and Hurd (2000) provide a rationale for the increase in use of team learning:

> Team learning…attempts to introduce students to real world experiences in the classroom. It also changes the traditional boundaries of authority in the classroom by forcing team members to work with each other to make decisions instead of looking to the instructor for answers. (p. 4)

The small-group discussion process allows students to participate on a level that is less likely to intimidate and more likely to engage learning. Students feel they have a right to speak and exhibit some level of authority, albeit measured, within these small groups. Overcoming individual barriers is essential to broaching complex discussions and allowing the student to create meaning.

The Stream of Deep Learning

Traditional approaches to teaching appear to be invariant to institutional type and setting. Similar to other institutions of higher education, community colleges use lecture as the dominant instructional delivery method. However, the lecture rarely, if ever, supports learner engagement in inquiry, discussion, and/or expository learning. With the faculty member as the authority figure, the student operates as a passive recipient—an empty vessel—waiting to be filled (Cross, 1999). Dissent and disagreement, which are integral to constructing knowledge, may be perceived by the professor as roadblocks to authentic understanding or even as forms of learner misconduct and rebellion.

Modern teaching and learning environments warrant new teaching and learning strategies (Evans, 2006) that may "arouse inevitable feelings of discomfort or anxiety" (Bonwell & Eison, 1991, p. 53). "Effective teaching, directed toward improved student learning, is tantamount to establishing a professorate that operates with currency and competency on the frontline of instructional excellence" (Evans, 2006). To educate and motivate faculty on the importance and use of cooperative learning strategies in the classroom, Millis (2003) suggests the use of well-structured and well-planned cooperative games (e.g., *Jeopardy!* and Bingo).

Although whole-class discussion has experienced some increase in traditional lecture-oriented classrooms, Socratic dialogue seldom asks students to generate knowledge beyond pre-determined conclusions that the instructor has identified (Bruffee, 1999). To effect critical thinking and generate new thought, students must become comfortable with a disciplined process in which they are free to express dissenting views and question stated ideas. Essentially, the inquiry-based teaching and learning environments provide a sturdy framework for constructing knowledge. Peer-to-peer interaction within small groups provides an optimum venue for refinement of critical thinking skills.

Moreover, to encourage creativity, faculty may integrate writing assignments that require students to apply higher-order skills—analysis, synthesis, and evaluation. "Writing can be an effective tool to help students become active participants in their own learning. In addition, writing is most effective when used to encourage critical thinking and communications skills" (Hennessy & Evans, 2005, p. 12). Often, however, instructors may presume learner familiarity with the use of critical thinking. Therefore, they fail to include direct instruction on how to effectively deploy the skill in creating new knowledge.

Additionally, with the advent of online learning, cooperative and collaborative learning methods foster equally important debate in electronic environments, creating "[disequilibria], the resolution of which should encourage students to decenter from their own points of view" (Bonk & King, 1998, p. 4). In summarizing techniques used to facilitate interaction in an online community of faculty learners, Evans (1999) suggests that community college learners build camaraderie through computer-mediated communication. It helps to provoke thoughtful commentary since students realize their messages will be posted to the entire class. Further, Evans (2004) reports the use of peer review to build trust among online learners, as well as to invigorate overall instruction.

The Stream of Diversity

Diversity affects everyone and, as such, cannot be ignored. Historically, cooperative learning methodology was developed in settings where few, if any, students came from heterogeneous cultural backgrounds (Holt, Chips & Wallace, 1991). In the cultural tapestry that is the contemporary community college, students may initially need the support of like-culture transition groups that allow them to grapple with their outsider status, to move beyond the limited vocabularies and worldviews of their previous experiences, and to learn the modes of discourse in the new setting. Bruffee (1999) explains the role of such groups:

> The agenda of . . . transition group[s] is to provide an arena for conversation and to sustain us while we learn the language, mores, and values of the community we are trying to join. Transition groups provide us with understanding peers whom we can rely on as we go through the risky process of becoming new members of the knowledge community we are trying to join. (p. 8)

For example, Uri Treisman attributes a tendency for Asian-American students to outperform African-American and Hispanic students largely to the existence of strong, vibrant transition groups for Asian-American students who "moved in packs, ate together, studied together, went to classes together" (Bruffee, 1999, p. 13). By contrast, African-American and Hispanic students whom Treisman

observed were largely isolated from one another. They seldom studied or talked together about their work. The example highlights like-culture and/or ethnicity as a bonding force for the transition group; the concept of tightly knit supportive peer groups is equally important.

In the community college, nontraditional learners may have an increased initial sense of themselves as outsiders within the academic community if they have adopted a rigid culture of acceptance in looking only for the indisputable "right answer." These learners must realize the relevance of examining issues from numerous informed viewpoints. Peer discussion, review, and interactive discussion—predicated upon intelligent debate—are crucial exploratory steps in the metamorphosis that students undergo as they become active, contributing discussants in learning environments.

The use of small-group learning is likely to help create transition groups that may aid at-risk and adult learners as they enter or reenter an academic setting. Brewer, Klein, and Mann (2003) report significant increases in confidence and motivation for adult re-entry learners who engage in courses that featured collaborative learning. Thoughtfully constructed small-group learning activities have the potential to improve student persistence, promote critical thinking, foster advanced student learning, and increase multicultural and global awareness.

Constructing successful small-group learning opportunities

To best meet the needs of their students, community college faculty need to consider the factors that affect small-group learning opportunities:

- Group size
- Collaboration vs. cooperation
- Positive interdependence
- Social isolation or dominance
- Modeling discussion and critique
- Student point of entry

Group size

Clusters of four to seven students are ideal. In groups of fewer students, there may not be enough viewpoints or experiences to stimulate active discussion, thereby allowing students to move beyond simply confirming their own views. In groups larger than seven, shy or low-status students may be left out of the discussion (Lyons et al., 2003). Additionally, within larger groups, students may be able to duck a sense of individual responsibility for forming group thought and/or completing group-related assignments.

Collaboration vs. cooperation

Collaborative learning approaches seem appropriate for the community college classroom because they elicit higher-level thinking. Coop-

erative exercises are less likely to do so and are less likely to spark student motivation. Those who doubt this point should walk into any college classroom and ask students what they think about group work (which the vast majority of students have only experienced cooperatively). Many will make comments that associate such an activity with the busywork common to primary and middle schools.

Positive interdependence

Since the benefits of interdependence are multiple, small-group learning exercises should go beyond merely requiring group interaction to avoid negative consequences. For example, "If one part of the report is missing, the whole group will fail." Instead, it is better to present group activities in terms that allow students to see interdependence as positive and necessary for creating complex, useful meaning. In cooperative learning, interdependence is usually formalized through a specific structure and roles; in collaborative settings, interdependence is often the subtle recognition that dissent, disagreement, social interaction, and even resistance among the varying group members are necessary to navigate the data-information-knowledge continuum. Positive interdependence is a quintessential quality that defines collaboration and transforms group work into teamwork (Cuseo, n. d.).

Social isolation or dominance

In classrooms, status is often determined by a student's characteristics—personality, attractiveness, race, ethnicity, gender, sexuality, etc.—combined with academic abilities. Thus, classroom status, in addition to innate personality traits, may influence the roles students play in small-group learning exercises. Students who are introverted may experience isolation within a group and, therefore, participate less. Students who have extroverted personalities may dominate group work and accompanying discussion. In either case, the learning process is not well-served because fewer minds and mouths are participating in creating knowledge.

Webb (1991) notes that "students who give other students content-related explanations may benefit from the group work, but students who only receive brief answers from other students may actually be negatively affected" (as cited in Prorak, Gottschalk, and Pollastro, 1994, para. 7). Considering isolation or dominance is, then, not merely an issue of helping students improve social and communication skills but an essential in the learning process. As a counterbalance, Cohen (1998) suggests either assigning roles or creating group activities that complement the varying abilities and personalities of students.

Modeling discussion and critique

While discussion has been presented as a means to foster critical thinking, its role may, in fact, be much greater. Recent studies indicate that discussion is not only necessary to spur critical thinking but also is a part of critical thinking itself. "There is growing recognition . . . that critical thinking involves the ability to participate in ongoing conversations about important issues" (Nussbaum, 2002, para. 1).

To help students engage in thought-provoking discussion essential to collaborative learning, Nussbaum (2002) suggests that faculty explicitly model ways to effectively discuss complex issues in a group setting.

Modeling helps lessen the effects of social isolation or dominance within groups and may also deter unproductive or off-task behaviors. Even more important, faculty may need to model the process of critical thinking, particularly regarding the question of authority. Because students rarely feel they have the right to comment on another's work or on the ideas of an "expert," learning to be comfortable with this line of inquiry is a necessary prerequisite to successful critical thinking and group collaboration.

Student points of entry

To support the student transition from limited/localized experiences to the new discourse community of higher education, Bruffee (1999) argues that ports of entry must be provided. They help students "loosen their loyalty to some of the communities they are already members of . . . and marry instead into the knowledge community that the professor represents" (p. 78). For the union to occur, topics must allow for "setting sail" from a student's prior knowledge/world experiences to the intended academic discourse.

Faculty resistance to small-group learning

"A professor's sense of professional definition tends to resist change" (Bonwell & Eison, 1991, p. 53). When discussing group work, faculty commonly display attitudes that range from mild resistance to outright antipathy. Faculty reticence to using small-group learning often follows the perception of group activities as "filler" material, concocted to cover lack of instructor preparation. Moreover, collaborative learning, as well as cooperative learning to a lesser extent, asks the teacher to share authority with students. While the tug of war over authority may occur in all classrooms, it is exacerbated in higher education by predominant institutional cultures that emphasize professors as experts in their subjects, but de-emphasize expertise in the art of teaching. The focus on expertise within one's discipline may reinforce the professor's self-perception as the only valid voice of authority within the classroom.

The lack of structure and/or off-task behaviors that frequently accompany small-group learning may also challenge beliefs of teachers who value classroom discipline. Many explanations for faculty resistance exist, but most of them can be tied to the simple issue of professorial authority. Bonwell and Eison (1991) assert that "faculty can become self-enchanted as they think aloud and lecture" (p. 53). Faculty, as purveyors of knowledge, expect to be aware and in charge of all classroom activity, conversations, and interactions. As such, many faculty dread the thought of an "out of control" classroom, filled with independent thinkers and thinking.

Community colleges, with their distinctly different institutional culture from universities, are at an advantage to overcome such obstacles. Historically, they have heralded the role of faculty as educator, and secondly, as discipline-specific expert. In recent decades, they have helped create learning-centered schools. Community college faculty, then, are more likely to possess the attitudes and philosophy towards education necessary to use small-group learning successfully in their courses. Faculty willingness alone may not support the objective, and graduate programs offer incoming community college faculty little pre-service training in pedagogy and even less discussion of the specific needs of the community college student body (Cohen & Brawer, 2003).

Student resistance to small-group learning

Tinto (1987) discovered that there are dramatic increases in learning "when classes were structured around peer learning that occurred outside of the classroom" (as cited in Lundberg, 2003, para. 3). However, among students, there is significant hesitation to participate in out-of-class peer learning activities, because of time constraints and scheduling difficulties (Lundberg, 2003). Many community college students are married, have children, hold full-time jobs, and/or are beyond traditional college age. Therefore, requiring participation in groups outside the classroom may not only create difficulties for these students, but may also lead to negative attitudes towards small learning groups.

Informal conversations with students about group work often uncover the disdain of those who have had bad experiences in coordinating group learning sessions outside the classroom. The stress the situations create often leaves a lasting negative impression. Often, the source of the tensions is not the content of the assignment itself but, rather, "dysfunctions in group process," or "dissatisfaction with roles . . . when members perceive that others are not contributing an equal share" (Winter & Neal, 1995, para. 5-6).

Student resistance may also be cultivated by the unspoken roles students play within groups. In any heterogeneous group are stu-

dents from varying racial, ethnic, religious, and class backgrounds. While part of the value for small-group learning is allowing exchanges that expose students to other viewpoints and cultural experiences, students may rightly feel limited, stereotyped, and pigeonholed when they sense they have to be the voice for "their people." To avoid such potentially debilitating situations, faculty may need to preface learning activities with whole class discussions about political correctness and diversity within cultural groups. In cyberspace environments, the discussions usually pertain to discourse protocol or, as it is commonly known, netiquette.

Prorak et al. (1994) note a common and often overlooked problem in the literature. Attempts by teachers to categorize students according to personality types are often counterproductive and inaccurate since classroom behaviors are often more indicative of status than of personalities (Cohen, 1998). While many researchers seek a simple correlation between teaching styles and student personality types, at best, studies of these issues report results that support a relationship. At worst, the studies arrive at contradictory and generally discarded results that do not fit the research hypothesis.

Student resistance may not be an overriding concern, however, since studies suggest that whether or not students like group activities, they do positively influence learning and grades (Winter & Neal, 1995). However, the stress levels of students should not be needlessly or thoughtlessly tested unless a valuable educational outcome can be expected. In other words, group work for its own sake may actually be counterproductive. If poorly implemented, small-group learning activities may adversely affect student achievement, motivation, and potentially "dumb down" the curriculum (Prorak et al., 1994).

Conclusion

Given a potential for improving student performance, raising the level of classroom discourse, and encouraging the creation of new thought, the benefits of small-group learning seem to outweigh the negatives. Research strongly suggests that a collaborative, not a cooperative, approach is more appropriate in the community college. At the very minimum, collaboration allows for greater higher-order thinking than does cooperation. While this idea should not discount the use of cooperative activities entirely — as there is some need for non-traditional approaches to learning information even in higher education settings — greater benefits are seen in instances where collaborative learning exercises are selectively tailored to meet course objectives.

Whether cooperative or collaborative in nature, small-group learning situations allow for greater comprehension and knowledge acquisition. As barriers to greater use and implementation of small-group learning strategies in the

traditional classroom, Cross (2000) observes the following:

> The problem is that not many faculty members have much experience in planning and organizing productive student learning groups, and many are honest skeptics about how much students really learn from discussion with their peers. Students, too, sometimes complain that they want to learn from the "experts," not from peers "who don't know any more than I do about the subject." (p. 6)

When Cross (2000) characterizes the current interest in cooperative and/or collaborative learning as "a swelling river of interest ... with four identifiable streams of thought" (pp. 5-6), she intimates the river of interest in small-group learning is flowing with the current of contemporary thought—belonging, career preparation, deep learning, and diversity.

The most effective small-group learning puts students in situations where they must negotiate meaning and examine unfamiliar and, often, complex concepts. When students probe and negotiate meaning both beyond and within a group setting, their understanding is broadened as they begin to feel a sense of *belonging* within an academic community of experts (Kang, 1998).

Students need to master working independently, dependently, and interdependently, as each of the scenarios is a valuable aspect in daily interactions and *career preparation*. To foster *deep learning*, teachers need to introduce alternative instructional techniques to replace the anachronistic talking-head syndrome (Holt et al., 1991).

Ultimately, then, diverse learners need to learn appropriate models of critical discourse, and they need co-requisite opportunities to practice constructing knowledge in honest, give-and-take peer discussion. Finally, cultural and linguistic *diversity* have major implications for minority learners who arrive in large numbers in community colleges. Teachers and students need to understand how to positively interact across varying and diverse cultural and linguistic backgrounds.

More than three decades ago, Freire challenged educators to aid student liberation and develop free thinkers by blending the lecture with other forms of instruction—e.g., active, cooperative, and collaborative learning methodologies. Small-group learning is especially amenable to community college settings in which large class size is more the exception than the rule. Incorporating small-group learning experiences in the classroom provides a readily applicable strategy for fulfilling Freire's emancipation theory.

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