

## ABSTRACT

Title of Dissertation:       The Effects of Peer Collaboration on  
                                  Community College Freshmen's Writing,  
                                  Socialization, and Attitudes

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This was a study investigating the effects of peer collaboration on 15 community college freshmen's narrative writing, on their socialization, and on their attitudes toward writing during a semester freshman composition course. One narrative writing sample was collected at the beginning of the semester and a second was collected near the end of the semester. An attitude survey also was administered at the beginning and at the end of the semester. In addition, eleven class sessions during the semester were observed and audio taped by the researcher. A student in the writing class served as a key informant to assist in assessing the validity and reliability of the researcher's observations. Interviews with the teacher were held also. The writing samples were scored holistically; the attitude surveys were analyzed; and the researcher's observations and audio tapes were analyzed and interpreted in concert with the observations made by the key informant and the teacher. Writing Sample A revealed a 1.86 average score; Writing Sample B revealed a 2.35 average score, a difference of .49. Attitude Survey A revealed a 3.29 mean; Attitude Survey B revealed a 3.75 mean, a difference of .46. Observations and interviews verified the writing sample and survey results. Results suggest that peer collaboration may have had a positive effect on students' writing, their socialization, and their attitudes toward writing.

THE EFFECTS OF PEER COLLABORATION ON COMMUNITY  
COLLEGE FRESHMEN'S WRITING, SOCIALIZATION,  
AND ATTITUDES

by

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1992

DEDICATION

To Don and the children:

Donnie and Stephanie

and my mother

Gladys M. Smith

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## CHAPTER I

### Introduction

Writing theorists and practitioners are finding that the development of socialization within a classroom may have a significant impact on fostering the development of students' cognitive abilities (Hays, et al., 1983; Heath, 1983; Hillocks, 1986; Slavin, 1983). According to Kroll (1978), students with more advanced socialization skills, which he calls social cognitive skills, are better writers than those students having less advanced social cognitive skills. Peer collaboration is one instructional method which fosters socialization. Currently, writing researchers are investigating peer collaboration as an instructional method in order to examine its facilitative effects on students' writing (Bruffee, 1986; Maimon, 1983; Slavin, 1983).

The purpose of this chapter is to introduce the present study. The researcher will discuss (a) peer collaboration, (b) peer collaboration and the teaching of writing, (c) peer collaboration and socialization, and (d) peer collaboration and student attitudes.

#### Rationale

Most researchers suggest that composition instruction is in need of reform (Brodkey, 1987; Bruffee, 1986; Daiute, 1985; Hillocks, 1986; Slavin, 1985a). If peer collaboration is an effective method of instruction, then systematic research is necessary to examine the effects of peer collaboration

in writing classrooms. George (1984) posited that peer collaborative learning has become a "popular method of teaching revision to undergraduates," maintaining that still little is known about the socialization of group members (p. 320). In this study, the researcher examined the effects of peer collaboration on the teaching of writing, on socialization, and on students' attitudes about writing.

### Peer Collaboration

Hillocks (1986) described peer collaborative learning as an environmental method of learning which replaces passive learning with active learning. Hillocks (1986) defined the environmental method of learning as a method of instruction by which teachers "minimize lecture and teacher-led discussion" (p. 122). Students work on specific tasks in a group "before proceeding to similar tasks independently" (Hillocks, 1986, p. 122).

The Encyclopedia of School Administration and Supervision (Gorton, et al., 1988) defined peer collaborative learning as an instructional method by "which teachers structure student-to-student interactions [that] will influence how well students achieve academically, how they feel about school, . . . their teachers and other personnel, . . . each other, and how they feel about themselves as learners and as individuals" (p. 78). Peer collaborative learning, also called cooperative learning, is a teaching strategy which requires students to utilize interpersonal skills within a group to bring about change (Gorton, et al., 1988). According to Slavin (1985a),

students actively communicate with one another in a peer collaborative setting.

Researchers continue to debate over whether or not there is a link between peer collaboration and achievement (Johnson & Johnson, 1985; Kagan, 1989/1990; Slavin, 1983). Slavin (1983) argued that achievement could result from a positive reward interdependence within a collaborative classroom. He also argued that achievement could result from a goal interdependence within a collaborative classroom (Slavin, 1983). According to Slavin (1983), students will increase their achievement when there is a specific group contingency, such as positive reward interdependence and/or goal interdependence. When there is a specific collaborative-skills contingency, cooperative behavior is enhanced, but more evidence is needed to strengthen the conclusion that collaborative learning experience provides a link to achievement (Slavin, 1983).

Slavin (1980) asserted that collaborative learning can positively affect students' cognitive and affective behavior, but he warned that the results from studies could be situation-specific. More studies are necessary to include the complexity of the teacher's role, the student's role as individual, and the student's role as group member. Teachers are faced with the difficulty of teaching students a way to engage in learning activity that enhances cooperation. To engage in cooperative learning, students must learn new roles in order to respond to a new set of expectations different from their previous experiences. The complexity of the peer collaborative method of instruction requires further investigation.

The teacher's role changes in a peer collaborative classroom, and staff development needs to be taken into account in considering peer collaborative instruction. The cost of peer collaborative learning includes teacher training. Teachers need training in order to implement the instructional strategy. According to Schultz (1989/1990), "Teachers must give adequate attention to monitoring and teaching social skills if they are to introduce cooperative learning successfully" (p. 43). Cooperative learning shifts the teacher from the front of the classroom to the center of it with the students (Johnson et al., 1984; Slavin, 1985b). Both the physical position and the role of the teacher change, which means that the teacher must be prepared to meet different challenges in the collaborative classroom (Schultz, 1989/1990).

Johnson and his colleagues (1984) emphasized that teachers must outline the collaborative goals for the students. To minimize problems, teachers must be specific about which behaviors are appropriate and which behaviors are not appropriate in the peer collaborative classroom (Johnson et al., 1984). These researchers advised that when a problem arises, the teacher must be prepared to present it to the group of students, who should have the responsibility of solving it. Problem solving could enhance social skills (Johnson et al., 1984). More studies of what actually happens in a peer collaborative classroom could lend insight into how to prepare teachers to implement peer collaboration as an instructional method.

According to Kagan (1989/1990), "Teachers who are well versed in a variety of team structures can create skillful lessons that engage and enlighten their students" (p. 12). Kagan (1989/1990) argued that organizing social interaction in the classroom is important to the success of peer collaborative learning. Peer collaborative learning can enhance teacher roles, student roles, and communication (Kagan, 1989/1990). The teacher is important to the success of peer collaborative learning, organizing social interaction that will engage and enlighten students (Johnson & Johnson, 1985; Kagan, 1989/1990; Slavin, 1985b).

The student's role changes in a peer collaborative classroom, which means that the student must be prepared to meet different challenges (Johnson & Johnson, 1985; Slavin, 1985b). According to Schultz (1989/1990), in past years, students were taught to learn in a more competitive learning environment. In the peer collaborative classroom, students must be taught to learn in a more cooperative environment. Peer collaboration involves cooperation: positive interdependence, face to face interaction, individual accountability, group processing, and interpersonal skills (Johnson et al., 1984). Smith (1987) suggested that students should be told prior to a peer collaborative experience that they should make contact with one another while speaking and listening, praise one another's responses, and express disagreement without hostility. The students must be prepared to meet different challenges in the peer collaborative classroom (Johnson & Johnson, 1985; Slavin, 1985b). The present study was an investigation of the effects of peer collaboration.

### Peer Collaboration and the Teaching of Writing

Peer collaboration is a method of learning which combines learning and the social experience in the writing classroom. Peer collaboration may be an effective method for the teaching of writing because students learn to adjust their linguistic choices to fit the needs of the social context, the writing classroom (Pappas & Brown, 1987). Also referred to as cooperative learning, peer collaboration has both a cognitive and a social component (Slavin, 1985a). Students learn to write through interacting with their peers.

Recent research has indicated that writing is inherently a collaborative activity (Brodkey, 1987; Bruffee, 1983; Maimon, 1983). Kroll(1978) asserted that students with more advanced socialization skills are better writers, attributing the phenomenon to a natural link between speaking and writing. Bruffee (1983) supported this notion, positing that communication is not complete unless it has had a response from an audience. As an active audience, peers respond to one other's drafts in the collaborative classroom (Bruffee, 1983). Students speak to one another about their writing in a collaborative classroom.

Inherent in reader-writer interaction is a social factor resulting from two or more individuals sharing ideas (Boiarsky & Johnson, 1983). Sharing ideas in a peer collaborative classroom may have an impact on social cognition, which plays a significant role in reading and writing development (Boiarsky & Johnson, 1983; Bruffee, 1983; Slavin, 1985a).



Burleson and Rowan (1985) defined social cognition as "the general term given to a host of psychological processes through which individuals make inferences about the characteristics and qualities of others" (p. 26). Several researchers have argued that students with more advanced social cognitive abilities are better readers and, therefore, better writers (e.g., Kantor & Rubin, 1981; Kroll, 1978; and Moffett, 1968; Rubin & Rafoth, 1986). Social cognition, also called socialization, may enhance writing.

Peer collaboration is a method of instruction which might enhance socialization and writing achievement. However, according to Schultz (1989/1990), "Teachers must give adequate attention to monitoring and teaching social skills if they are to introduce cooperative learning successfully" (p. 43). Because of its socialization factor, Augustine, Gruber, and Hanson (1989/1990) advocate peer collaborative learning for enhancing achievement. Teaching writing using peer collaboration may enhance students' linguistic power. The present study was an investigation of the effects of peer collaboration on the quality of community college freshman writing.

#### Peer Collaboration and Socialization

Defined by the Encyclopedia of School Administration and Supervision (Gorton et al., 1988), socialization, called social learning, is the process by which individuals acquire self-identity, systems for classifying and describing people, social interaction skills, and a sense of belonging to a

group. According to Bruffee (1983), socialization is enhanced in the peer collaborative classroom for the teaching of writing. He argued that writing is organic to thinking, and learning to write should be an active, social process.

In a peer collaborative setting, students interact with one another and the teacher, thus enhancing socialization. During this interaction, collaborative learning seems to link thinking, reading, and speaking to writing, which are elements of socialization. Moffett (1968) and Britton et al. (1975) suggested that the relationship between writing development and socialization has caused theoretical questions to emerge concerning the effect of thinking, reading, and speaking on writing development. A writer's conception of his/her social context may positively impinge upon his/her rhetorical choices (Hillocks, 1986). Peer collaboration may enhance the socialization of students.

In a peer collaborative setting, students are permitted the opportunity to talk about their experiences while reading and writing, making personal and social associations with topics. Trimbur (1985) noted that peer collaborative learning closely approximates the conditions of writing in business and the real world. The social and cultural dimensions of writing are addressed more directly, since relationships between writer and reader are acted out in group instruction. Enhanced socialization may affect student writing skills. Bizzell (1982) argued that "what looks like a cognitive difference (between skilled and unskilled writers) [may] turn out to have a large social component" (p. 233). Students who make personal and social

associations with writing may write better than students who do not make those associations. The present study was an investigation of the effects of peer collaboration on the socialization of community college freshman composition students.

### Peer Collaboration and Student Attitudes

Slavin (1983) posited that peer collaboration may have positive effects on students' attitudes toward writing. Daiute (1985) found that peer collaboration enhances writing achievement, asserting that active group involvement makes for positive student attitudes. Group involvement may provide opportunities for students to increase their language awareness and sensitize them to various ways in which language can be used in various settings, which may improve their attitudes toward writing (Bruffee, 1983).

In a peer collaborative writing class, students orally communicate with one another, responding to one another's drafts. Slavin (1983) hypothesized that when students express themselves through oral discourse, prior to writing, they express ideas more clearly in written discourse. According to Slavin (1983), collaborative learning may have cognitive benefits because students enjoy writing more when their peers assist them in the process.

Peer collaborative learning is also termed cooperative learning. According to Slavin (1985b), students learning to cooperate with students may have positive effects on achievement, intergroup relations, and attitudes.

More research is necessary to understand how cooperative learning affects relationships across sex and ethnic lines (Slavin, 1985b).

Johnson and Johnson (1985) postulated that students support one another in a task-oriented situation, which benefits them academically. When students succeed, they feel good about themselves, according to Johnson and Johnson (1985). A peer collaborative learning experience could result in students feeling personally liked, supported, and accepted by their fellow students. Johnson and Johnson (1985) reported that students like learning cooperatively because they feel that other students want them to succeed academically. The present study investigated the effects of peer collaboration on community college freshman composition students' attitudes toward writing.

#### Statement of the Problem

Research questions have emerged concerning the socialization among members in a peer collaborative class and its effects on instruction and attitudes. Peer collaboration should be investigated for its effectiveness as a method of instruction for teaching students to write. This study was an investigation of the effects of peer collaboration on community college freshmen's writing, on their socialization, and on their attitudes toward writing.

Open-admission colleges, in the 1970s, became populated with both traditional and nontraditional students. Many students described as nontraditional began seeking higher education. Nontraditional students

were older than traditional students and appeared to require changes in the traditional instructional method, since academic deficiencies seemed to emerge.

### Significance of the Study

Since the report of Nation at Risk: The Imperative for Educational Reform (1983), there has been a renewed national concern regarding the serious writing deficiencies among college students. As evidenced by the research, the needs of the students are not being met in the composition classroom (Bartholomae, 1986; Bruffee, 1986; Slavin, 1980). Researchers have focused their studies on methods for teaching composition (Moffett, 1983; Pappas & Brown, 1987; Slavin, 1983). An alternative method for teaching composition involves peer collaborative learning, which maximizes student socialization. Bruffee (1986) posited that learning to write exceeds the limits of the student working in isolation, because a writer's language originates within a social context. Peer collaboration is a method of instruction which requires students to actively participate in the learning process by which they learn to write. Peer collaboration may provide an effective alternative method for teaching composition.

The writing teacher, struggling to maintain high academic standards, often clings to what appeared to be an effective method of instruction in past years. However, low writing achievement among college students necessitates the investigation of alternative teaching methods in

composition (Bartholomae, 1986; Bennett, 1985; Bruffee, 1986; Slavin, 1980). This investigation of the socialization of students in a peer collaborative classroom may provide a contribution to the field of research in the teaching of writing.

### Research Questions

Three questions were asked in this study:

1. What are the effects of peer collaboration on the quality of community college freshman writing?
2. What are the effects of peer collaboration on the socialization of community college freshman composition students?
3. What are the effects of peer collaboration on community college freshmen's attitudes toward writing?

### Definition of Key Terms

The following terms were defined for the purpose of this study:

1. Quality of Writing refers to the effectiveness of student writing as measured by a holistic rating scale.
2. Attitude toward Writing refers to the student's affective response to expressing him/herself on paper, as measured by an attitude survey.
3. Peer Collaboration Instruction, called cooperative learning, refers to students learning to write through student-student interaction, in a small group, with the teacher acting as facilitator (Mason, 1972).

4. Lecture Method of Instruction refers to students learning to write through a teacher's oral delivery of notes.
5. Socialization refers to the process by which individuals acquire self-identity, systems for classifying and describing people, social interaction skills, and a sense of belonging to a group (Gorton et al., 1988).
6. Holistic Scoring refers to a guided procedure for ranking written discourse (Cooper & Odell, 1977).
7. Triangulation refers to a multi-instrument approach for collecting data. Data collection may include surveys, interviews, observations, and pre- and post-writing samples.
8. Key Informant refers to a student who freely interacts with peers and the teacher and is willing to provide information to the researcher. The key informant is one component of triangulation.
9. Job Training Partnership Act (JTPA) refers to a federal grant which funded low-income students to attend college for job training.
10. Special Student refers to a student with a self-reported inability.

#### Limitations of the Study

This study included the following limitations:

1. One community college freshman composition class was studied.
2. The class was not randomly selected because of administrative limitations.

3. The results of the study cannot be generalized to other community colleges' freshman composition classes.
4. The Hawthorne Effect may have been present.
5. While audiotaping did not appear to affect most students after the first few minutes of a class session, students were aware of its use.

#### Basic Assumptions

The following assumptions were basic to this study:

1. Students' writing samples represented their respective levels of writing proficiency.
2. Holistic scoring was a valid and reliable measure to rate the quality of student writing.
3. The class size of 15 was not the sole factor for rates of student achievement and changed student attitudes toward writing. The typical class size of a composition class was 30.
4. Peer collaborative learning enhances socialization among students.
5. Enhanced socialization among students has a positive effect on the quality of students' writing.
6. Enhanced socialization among students has a positive effect on students' attitudes.



### Conclusion

The state of student writing at the college level is a national concern (Bennett, 1985; Nation at Risk, 1983). Further investigation of an alternative method which composition instructors use to teach students to write may yield significant data which could contribute to reversing student writing deficiencies. Specifically, the investigation of the socialization of students in a peer collaborative writing classroom may offer insight into what happens between and among students who are learning how to write.

### Chapter Summary

Chapter I introduced the study which investigated the effects of peer collaboration on community college freshmen's writing, on their socialization, and on their attitudes toward writing. Chapter II will review the relevant research literature focused on peer collaboration, peer collaboration and the teaching of writing, peer collaboration and socialization, and peer collaboration and student attitudes.

## CHAPTER II

### Review of Related Literature

The purpose of this chapter is to review the literature relevant to the study. The chapter is divided into five sections: (a) a statement of the research questions; (b) a review of literature on peer collaboration; (c) a review of literature on peer collaboration and the teaching of writing; (d) a review of literature on peer collaboration and socialization; and (e) a review of literature on peer collaboration and students' attitudes.

#### Research Questions

Three questions were asked in the study:

1. What are the effects of peer collaboration on the quality of community college freshman writing?
2. What are the effects of peer collaboration on the socialization of community college freshman composition students?
3. What are the effects of peer collaboration on community college freshmen's attitudes toward writing?

#### Peer Collaboration

The Encyclopedia of School Administration and Supervision (Gorton et al.,1988, p. 78) defined peer collaborative learning as an instructional method by "which teachers structure student-to-student interactions [that] will influence how well students achieve academically, how they feel about school, . . . their teachers and other personnel, . . . each other, and how they feel about themselves as learners and as individuals." Peer collaborative

learning, also called cooperative learning, is a teaching strategy which requires students to utilize interpersonal skills within a group to bring about change (Gorton et al., 1988). According to Slavin (1990), Johnson and Johnson (1990), and Kagan (1989/1990), the change could result in increased achievement.

The Slavin Theory. Researchers continue to debate over whether or not there is a link between peer collaboration and achievement (Johnson & Johnson, 1985a; Kagan, 1989/1990; Slavin, 1983). In Learning to Cooperate, Cooperating to Learn, Slavin (1985b) advocated cooperative learning as a method of instruction which could enhance academic achievement in subject areas that included reading and writing. He identified field experiments in elementary and secondary schools that studied the effects of cooperative learning on student achievement. Of the 46 field studies, 29 studies resulted in favorable effects. There were no differences in 15 of the studies; in two of the studies, a significant difference favored the control group.

Slavin (1985b) explained the pattern of results as a consequence of cooperative methods which emphasized individual accountability in terms of a positive reward interdependence. According to Slavin (1983), students should increase their achievement when there is a specific group contingency, such as positive reward interdependence and/or goal interdependence.

He theorized that when group scores are offered for completed tasks, each group member assumes a separate role to satisfy the task. Slavin (1985b) supported his theory by citing some 27 studies in which the group members were rewarded on the basis of a group product. Almost 90% of the 27 studies

revealed enhanced achievement. When there is a specific collaborative-skills contingency, cooperative behavior is enhanced, but more evidence is needed to strengthen the conclusion that collaborative learning experience provides a link to achievement (Slavin, 1983).

Slavin (1985b) stressed the importance of designing cooperative learning methods that would increase individual accountability. He suggested that when individual students are responsible for separate tasks which contribute to the group task, both individual and group achievement could be enhanced. Further, Slavin (1985b) suggested that academic achievement could be enhanced by designs that utilize group scores. Other researchers have addressed the issue of achievement and cooperative learning (Johnson & Johnson, 1985).

The Johnson and Johnson Theory. In Learning to Cooperate, Cooperating to Learn (1985b), Johnson and Johnson discussed cooperative learning and academic achievement and cooperative learning and interpersonal behavior among students. According to these researchers, academic achievement can be enhanced by interpersonal behavior among students. To explain their theory, Johnson and Johnson (1985b) referred to Lewin's (1935) theory of motivation which postulated that tension within an individual motivated him/her to achieve the desired goal. According to Johnson and Johnson (1985b), motivating tension is enhanced in a cooperative learning situation because of the interpersonal behavior among students.

Johnson and Johnson (1985b) theorized that interpersonal behavior is organized in three ways, each resulting in a specific goal structure:

cooperative, competitive, and individualistic. These researchers postulated that the goals in a cooperative goal structure are linked among the separate individuals. According to Johnson and Johnson (1985b), in a purely cooperative structure, group members can achieve their goals only if the other members of the group achieve theirs.

Johnson and Johnson (1985b) theorized that in a competitive goal structure, students can achieve their goals only if the other members of the group do not achieve theirs. In an individualistic goal structure, students can achieve their goals without affecting other students (Johnson & Johnson, 1985b). Johnson and Johnson (1985b) posited that of the three goal structures, a cooperative goal structure could enhance academic achievement possibly because of interpersonal or social interdependence.

These researchers acknowledged the controversy which surrounds their assertions, stating that traditional research on cooperative learning is far from being complete. According to Johnson and Johnson (1985b), despite the numerous studies comparing the effectiveness of cooperative learning, the processes involved in cooperative learning and academic achievement and cooperative learning and interpersonal behavior among students have been largely ignored. Traditional research may have neglected relevant questions having to do with the effectiveness of cooperative learning (Johnson & Johnson, 1985b; Kagan, 1985).

The Kagan Theory. According to Kagan (1985), cooperative learning is a small group method of instruction which provides conditions that allow students' natural curiosity, intelligence, and expressiveness to emerge and develop. To explain his educational philosophy, Kagan (1985) cited Dewey's

(1938) ideas on progressive education. Dewey (1938) described education as being experiential. According to Dewey (1938), experiences which lead to educational development are an outgrowth of environmental conditions which enhance socialization among students. Dewey's (1938) emphasis on socialization and the educational environment dovetailed with Kagan's (1985) theory on cooperative learning.

Kagan (1985) advocated cooperative learning because of theoretical arguments and empirical data which supported that peer cooperation could

1. enhance student achievement. . . ;
2. improve cross-ethnic relations;
3. aid in the successful mainstreaming of handicapped students;
4. facilitate the maintenance of minority cultural values;
5. promote positive social relations and prosocial development; and
6. increase the liking among students for class, school, learning, and self. (p. 67)

Kagan (1985) cited theorists and researchers such as Aronson (1978); Johnson and Johnson (1975); Johnson, Maruyama, Johnson, Nelson, and Skon (1981); Kagan (1980; 1983); Sharan (1980); and Slavin (1980; 1983). These theorists and researchers investigated cooperative learning and its systematic organization of social interaction.

Kagan (1985) described the systematic organization of social interaction as a distinguishing factor that differentiates cooperative learning from other methods of learning. He said that in a cooperative classroom, students are

encouraged to interact with one another through grouping and reward and/or task structures. Kagan (1985) advised that social interaction in a peer collaborative classroom should emphasize positive interdependence within a reward and/or task structure.

Kagan (1985) explained that each cooperative classroom is a unique classroom structure. While he pointed out the commonality among cooperative learning classrooms, he also pointed out the vast diversity among cooperative task structures and forms of social organization. Slavin and Johnson and Johnson are proponents of Kagan's theories surrounding peer cooperative learning.

Slavin (1985b), Johnson and Johnson (1985b), and Kagan (1985) are prominent researchers in the field of cooperative learning. They have authored and edited scholarly treatises on the topic (e.g., Learning to Cooperate, Cooperating to Learn; Cooperative Learning). Because Kagan, Slavin, and Johnson and Johnson are recognized authorities in the the field of cooperative learning, their studies are cited by other researchers (e.g., Sharan, 1985; 1990; Stenberg, 1981; Tackaberry, 1980), addressing issues concerning cooperative learning.

The following studies investigated some of the issues concerning cooperative learning. These studies were selected for review from a limited body of research literature on peer collaborative learning. They were selected because of their academic orientation, hence other studies addressing peer collaboration which did not concern academic topics. Moreover, the following studies underwent rigorous research methods.

The Watson Study. Watson (1988) studied the effects of collaborative learning on the achievement of high school biology students as compared with traditionally instructed students. Watson (1988) defined collaborative, or cooperative learning as classroom learning with students assigned to small, mixed ability groups working toward a common goal. The reward system was group interdependent, in that each member of the group worked to enhance the group's reward. Traditional instruction involved a teacher-oriented classroom in which lectures were delivered by the instructor. Students took notes dictated by the instructor. The reward system was competitive, in that each member of the class worked to achieve a grade on a standard scale.

There were a total of 11 teachers with 36 classes and 715 students included in this study. The same general subject matter was covered by all the teachers. An analysis of co-variance was used. Findings indicated that there was a significant difference between cooperative students and traditionally instructed students. Cooperative learning seemed to have a more positive effect on students' achievement.

Watson's (1988) study may include a limitation in that there was not uniformity in subject matter taught. While the same general subject matter was taught by each of the 11 teachers in 36 classes, exact subject matter was not taught in the different classes. That is, the same information was not disseminated in the same context on the same day. Inconsistencies in subject matter could have factored into the significant difference between the two groups. Another limitation may have involved the Group Educational Modules (GEM), which were materials used by the cooperative group. Behavioral objectives were delineated in these materials, so the cooperative



students had the benefit of packaged outlined behavioral objectives. The traditional students did not receive the same benefit. GEM materials may have influenced the difference factor in Watson's (1988) study of the effects of collaborative learning on the achievement of high school biology students as compared with traditionally instructed students. Cooperative versus competitive studies have been the focus of other studies (Bonaparte, 1989).

The Bonaparte Study. Bonaparte (1989) examined the effects of cooperative versus competitive learning on the mathematical achievement and self-esteem of urban second-grade pupils. The three hypotheses were that cooperative learning was more effective than competitive learning in increasing mathematical achievement, that cooperative learning was more effective than competitive learning in increasing self-esteem, and that the correlation between self-esteem and mathematical achievement is high and positive.

Two hundred and forty subjects were included in this study. Bonaparte (1989) collected data from a population of second grade students living in the Middle Atlantic Region of the United States. Results indicated that the analyses of co-variance supported the hypotheses. In addition, a Pearson Product Moment Correlation was used to determine if there was a relationship between mathematical achievement and self-esteem. The hypothesis was supported.

While cooperative learning students achieved with greater self-esteem than competitive students, Bonaparte's (1989) study may have ignored a significant fact. Increased self-esteem could be linked to achievement in

general, not necessarily mathematical achievement and not necessarily because of the method of instruction.

The Lyons Study. Lyons (1982) stated that although some studies indicate that cooperative learning enhances achievement, there still remains the question as to why this is so. Lyons (1982) tested the hypothesis that "a variable mediating achievement in cooperative learning groups is the extent to which the students' oral interactions reflect elaborative cognitive processing of the content of the learning task" (p. 2).

Seventy-nine high, middle, and low ability fourth, fifth, and sixth grade students were the subjects of this study. Students participated in the study for 40 minutes for 10 instructional days. Students learned a science unit during that time. The oral interactions of the students were examined for the content and level of cognitive processing in the context of performing the learning activities. Results of Lyons' (1982) study indicated that when constructive controversy was encouraged in a cooperative environment, there was significantly greater achievement and greater elaborative cognitive processing. In other words, students were able to offer more details.

While Lyons' (1982) study was based on the assumption that cooperative learning increased achievement, it addressed a specific mediating variable. More such studies might answer the question of why some students achieve more in a cooperative learning environment.

The Perreault Study. Perreault (1982) conducted a study in which he compared cooperative learning to noncooperative learning and their effects on cognitive achievement in junior high industrial arts laboratories.

Two junior high schools and two teachers participated in this study. Subjects were randomly selected from two seventh grade industrial arts classes. The Iowa Test of Basic Skills scores were used to identify two comparable classes from both schools.

Both teachers were trained to use cooperative learning and noncooperative learning techniques. Both teachers utilized experimental treatments. Perreault (1982) conducted the study over a six-week period, during which time subjects drew a metric 500 racecar.

A technical advisory committee examined the treatment-specific-achievement instruments for face validity. The instrument was designed to assess the dependent variables which were at the knowledge, comprehension, and application levels taken from Bloom's taxonomy of the cognitive domain. The author implemented a 2 X 2 randomized blocks design for each dependent variable. Factors were Teacher A/ Teacher B and cooperative learning/ noncooperative learning treatments.

Results from a two way analysis of variance of the data indicated that cooperative learning increased knowledge and comprehension achievement compared to the noncooperative learning. Application did not seem to be affected by the treatment. Questions continue to emerge as to why cooperative learning instruction results in positive effects in some studies and limited to no effects in other studies.

The Rybczynski Study. Rybczynski (1987) hypothesized in her study, of cooperative learning instruction, that peer summarization was more effective than individualization in helping students to learn from their social studies text.

Rybczynski (1987) studied sixty-two sixth grade students of average and above average abilities. During a five-week period, ten lessons were conducted. Students were randomly assigned to one of three learning groups: individual summarization, peer summarization, and question answering. Students were asked to summarize from their text individually, with a peer, or answer questions. Teachers used scripts for instruction that were designed by the researcher.

At the end of the study, students from each learning group were asked to write a recall of two passages from their social studies text. Recalls were analyzed for determining a summary score and an important ideas score. In addition, a short answer test was administered for assessment. An analysis of variance was conducted to determine if groups differed on measures of learning. The results did not support the hypothesis. On the contrary, Rybczynski (1987) reported that there was evidence which suggested that individualization was more effective than peer summarization, or cooperation.

The Tackaberry Study. Tackaberry (1980) conducted a study to examine the effects of cooperation as opposed to competition on Hispanic and Anglo children. According to Tackaberry (1980), Spanish American children score lower on achievement tests than do Anglo children. She suggested that a factor which may contribute to this problem may be that Hispanic children have a low degree of interaction with Anglo children. Further, Tackaberry (1980) asserted that Hispanic children are never fully integrated into a classroom environment.

According to Tackaberry (1980), cultural difference has been identified as a possible handicap for Hispanic children. Even with the passing of the Bilingual Education Act, which mandates that bilingual children be taught in both their native tongue and English, Tackaberry (1980) argued that the cultural gap has not been bridged. In an effort to seek possible bridges to close cultural gaps between Hispanic and Anglo children in the classroom, Tackaberry (1980) examined the effects of cooperative learning. She asked: Does the cooperatively oriented classroom enhance relations between Anglos and Hispanics?

Findings indicated that cooperative learning reduced negative cross-ethnic nominations for playmates and that competition increased the number of unwanted cross-ethnic peers in math groups. Essentially, the cooperative treatment reduced strong negative feelings that tend to limit cross-ethnic interaction and socialization.

This study does not suggest that cooperative learning is a panacea for bridging cultural gaps. When children were asked to choose playmates, friends, and work group members, the cooperative intervention did not increase cross-ethnic choices. In addition, the positive results may have been a consequence of socioeconomic homogeneity among the students, rather than the method of instruction. Further study is necessary to address the issue of socioeconomic heterogeneity and cooperative learning.

Summary. The aforementioned studies examined some of the issues surrounding peer collaboration in academic education. These issues included interpersonal dependence, reward structures, achievement, self-esteem, constructive controversy, and cross-ethnic relations.

The studies mentioned were similar in that they examined the effects of peer collaborative learning, using rigorous research methods. The studies were different in that they examined peer collaboration with different emphases. Many of the results were the same: peer collaborative learning may enhance achievement. If this hypothesis is true, there are still unanswered questions as to why. Researchers continue to investigate questions such as: Why is cooperative learning successful with some students? Why is cooperative learning not successful with other students?

#### Peer Collaboration and the Teaching of Writing

According to Slavin (1990), peer collaboration is a method of instruction which combines the learning and the social experience in the writing classroom. Peer collaboration may be an effective method for the teaching of writing because students learn to adjust their linguistic choices to fit the needs of the social context, the writing classroom (Pappas & Brown, 1987).

Bruffee (1980) described peer collaborative learning in terms of reading aloud, interviews, collaborative group work, and peer criticism. He described each term as follows:

1. Reading Aloud. The most important text is the work of the writers, themselves. In understanding the effectiveness of their peers' writing, students gain greater insight into how to write more effectively.
2. Interviews. In this context teachers allow class time for students to pair off and discuss assignments before they are due. This activity

provides an opportunity for students to talk through their ideas before committing them to paper.

3. Collaborative Group Work. Working in small semiautonomous groups allows students to share in decision making. Group reports affirm decisions made, independent of the teacher.
4. Peer Criticism. Learning how to evaluate one's own writing is effectively achieved through learning how to evaluate others' writing.

Bruffee (1980) argued that the eclectic incorporation of the above methods of collaboration could benefit the quality of students' writing.

Recent research has indicated that writing is inherently a collaborative activity in the sense that authors write to communicate with an audience (Brodkey, 1987; Bruffee, 1983; Maimon, 1983). Through the medium of the written work, a writer interacts with a reader. Kroll (1978) suggested that students with more advanced social skills are better writers, attributing the phenomenon to a natural link between speaking and writing. Bruffee (1983) supported this notion, positing that communication is not complete unless it has had a response from an audience. As an active audience, peers respond to one other's drafts in the collaborative classroom (Bruffee, 1983). Maimon (1983) theorized that students reading and speaking to one another about writing could enhance their writing skills. Researchers have continued to examine theories surrounding collaborative learning and writing (e.g., Carroll, 1989; Garstka, 1984; Gere & Abbott, 1985; McCleary, 1990; Shepperson, 1989).

The following studies investigated some of the issues concerning collaborative learning. These studies were selected for review from a limited body of research literature on peer collaborative learning and writing. Further, the following studies on peer collaborative learning and writing were selected because they underwent rigorous research methods.

The Shepperson Study. Shepperson (1989) examined reading-writing relations and collaborative learning. The study investigated 48 students in grades 9-11. Shepperson (1989) collected data through techniques of participant observation, key informant interviewing, and document analysis.

Participants were remedial students involved in classroom activities which consisted of silent reading activities (worksheets and games) and writing activities (projects and journals).

Students were seated in small groups, which developed into collaborative learning structures. Students talked with one another about writing. However, according to Shepperson (1989), affective rather than cognitive learning developed in this setting, because students' discussions revolved around how they felt about topics for writing, rather than mechanics. Socialization skills were developed in that students were interactive, and common writing themes developed from social exchanges that students had with their peers.

The Shepperson study (1989) examined remedial students whose study skills may have been weak at the outset. Study skills and achievement may have been enhanced subtly. Assessment instruments may not have been fine enough to detect such subtle changes, which may have weakened the results of the study. Assessment instruments may need to be refined for research in



the field of writing (McCleary,1990). Another possibility is that the Shepperson study (1989) students may not have been affected by the peer collaborative method of instruction.

The McCleary Study. McCleary (1990) conducted a study of the effects of peer collaboration in the writing classroom. Subjects included 17 students in a freshman composition class and were studied for one semester.

The 17 students were divided into groups of four or five members. They were given a pretest essay. Groups spent time planning their papers, responding to each other's plan, and responding to one another's drafts. Group members were required to read their drafts aloud. Activity sheets were given to the students with a checklist of items to look for in drafts.

Posttest essays revealed an improvement of writing. A survey of students' attitudes toward collaborative work groups revealed that they liked the experience. McCleary's study involved a small population, which reduces generalizability and replication. However, more such studies would be a contribution to the limited body of literature on writing and peer collaborative learning (Gere & Abbott, 1985).

The Gere and Abbott Study. Gere and Abbott (1985) examined the language of writing groups at three grade levels, fifth, eighth, and eleventh-twelfth. They studied these writing groups in order to determine how well students remained on task in a group learning format and what linguistic power was available to these students. Here, linguistic power refers to students' ability to use vocabulary that relates to writing.

Gere and Abbott (1985) studied nine writing groups in regular classes taught by six different teachers. In this study, the researchers recorded

through observation notes what was actually said during writing group meetings. The researchers concluded that students stay on task and actually write about their discussions with greater linguistic power in writing groups. However, students may have remained on task because they were cognizant that they were being examined by the teacher and researchers.

Gere and Abbott (1985) found that students do concentrate on writing in a group learning format. Further, the researchers found that students' linguistic power is enhanced in a group learning format which can be attributed somewhat to the teacher who facilitates and guides the level and direction of discussion. Gere and Abbott (1985) advocated group learning, or peer collaborative learning, for the following reasons:

1. Group learning enables students to become conscious of themselves as writers.
2. The multiple foci of consciousness demonstrate the many perspectives available to members in a group format.
3. Students form a greater sense of audience in a group format.
4. Student responses to writing range from issues of diction and verb tense to concerns with coherence and logic.

According to Gere and Abbott (1985), collaborative learning provides a window into students' writing processes, allowing teachers to observe students in groups, hearing their criticisms, weaknesses, and strengths in an open forum. According to these researchers, students concentrate on writing in a collaborative setting. However, students may have been affected by virtue of their knowing that they were being studied by researchers. Students may have performed for researchers, and not necessarily the instructional

method. Further investigation may lend insight into how achievement is affected in a cooperative learning classroom (Carroll, 1989).

The Carroll Study. Carroll (1989) examined the effects of cooperative learning compared with lecture learning on achievement in college-level written business communication.

Forty-eight subjects were studied; 16 were control students and 32 were experimental students. A 75-item multiple choice objective pretest and posttest were administered to both classes at the beginning of the semester and at the end of the semester to measure students' achievement. A two-sample T-test was used to analyze data.

Findings indicated that there was no significant difference between the two learning methods: cooperative and lecture. Both methods were found to be equally effective. The 75-item objective pretest and posttest may not have been the best assessment instrument to measure writing achievement. Cooper and Odell (1977) argued that actual writing samples should be used to assess students' writing, because objective tests may merely measure students' editorial skills.

The Garstka Study. Garstka (1984) conducted a study which focused on the effects of group learning on community college basic skills students. A case study was conducted of an evening English Reading and Writing Basic Skills class. Garstka (1984) employed ethnographic research techniques for data collection. Data were collected through participant observation, field notes, interviewing, and examination of records.

Findings revealed that students were more responsive to learning activities that involved them in group discussion. Garstka reported that a

large percentage of the students dropped out of the class because of their different needs for taking the course. A follow-up study to find out why the students dropped out of the class could lend insight into how the students felt about group learning and how their feelings impacted on their achievement. Further, Garstka's (1984) investigation was a case study, with limited generalizability.

Summary. The aforementioned studies examined some of the issues surrounding peer collaboration and writing. These issues included group discussion, attitude toward method of instruction, time on task, and achievement.

Many of the findings of the above studies revealed that peer collaboration has positive effects in the composition classroom, but the studies are inconclusive. While there are many essays addressing peer collaboration in the composition classroom (e.g., Bruffee, 1986; Kroll, 1978; Maimon, 1979; Maimon, 1983; Shaughnessy, 1977), there is a limited number of studies which actually investigate the area. There remains the question: What are the effects of peer collaboration on the quality of students' writing? There is also the question of what happens to studies with nonsignificant findings.

### Peer Collaboration and Socialization

Defined by the Encyclopedia of School of Administration and Supervision (Gorton et al., 1988), socialization, called social learning is the process by which individuals acquire self-identity, systems for classifying and

describing people, social interaction skills, and a sense of belonging to a group. According to Bruffee (1983), socialization is enhanced in the peer collaborative classroom. He argued that learning should be an active, social process. Johnson and Johnson (1990) posited that peer collaboration enhanced students' interpersonal behavior, called socialization, which could render positive effects in the classroom. The studies that follow revealed both similar and dissimilar results.

The following studies investigated some of the issues concerning collaborative learning. These studies were selected for review from a limited body of research literature on peer collaborative learning and socialization. Further, the following studies on peer collaborative learning and socialization were selected because they underwent rigorous research methods.

The Hooker Study. Hooker (1988) conducted a study which examined cooperative learning and socialization with four gifted and talented students. The students were nine to ten year olds who were taught by an investigator-designed cooperative learning method. Hooker (1988) investigated changes in socialization, called interpersonal skills, and changes in attitudes. Modes of social interaction occurring most frequently among the four students were (a) interrupting, (b) expanding information beyond what is known, (c) admitting limited knowledge, (d) paraphrasing, (e) persuading, and (f) elaborating on ideas.

Hooker (1988) reported that the results of the surveys and transcripts of the students' dialogue relating to socialization showed a positive change in the four students. Three of the four students successfully supported their

peers, while one did but in a lesser degree. All students increased the number of people they considered friends, including cross-ethnic friends; all students increased the number of people who considered them friends.

According to Hooker (1988), all four students experienced conflict with socialization during the peer cooperative activities. However, no two students attempted to resolve the conflict in the same way. Attempts to resolve conflict included (a) shaming and chastizing the group, (b) ignoring the inappropriate behavior, (c) excluding the group member from interaction, (d) withdrawing or threatening to withdraw from the group, (e) trying to understand the other's perspective, and (f) changing the mode of operation that was the problem.

While three of the students did increase their socialization skills, one did not change his behavior significantly. All four of the students showed a favorable attitude toward school and toward the peer cooperative learning experience. Most of the students believed that (a) they had helped others, (b) they had received help, and (c) their group work was better than their individual work. According to Hooker (1988), all four students experienced improved attitudes about themselves and others after the socialization and group learning experience.

The four gifted and talented students under study had been socialized and conditioned to the educational system by virtue of the label gifted and talented. These students had been successful in previous educational experiences, and therefore, it should follow that they would be successful in subsequent educational experiences -- which would include the cooperative experience.

The Guntermann Study. Finding the opposite, of Hooker's study (1988), Guntermann (1988) conducted a study which examined the effects of group learning in a fourth grade class. The sixty students were divided into pairs. The students completed two tasks; they programmed two separate computer programs on two separate days.

Data for social interaction, computer contact, and achievement were recorded through audio tape recordings, observation notes, and a computer program evaluation.

Guntermann (1988) utilized a modified version of Bales Interaction Process Analysis Scale to code students' social interaction. Categories named were positive social interaction, negative social interaction, questions, and statements. Guntermann's study suggested that there was no link between socialization and achievement. Slavin (1990) warned that studies can be situation-specific and that one study may not be seminal necessarily.

The Prague Study. Prague (1988) hypothesized that cooperative learning increases students' achievement scores, social skills, and attitudes toward self, peers, and school. Prague's (1988) study required junior high school science students, in grades six through eight, to identify and define the social skills that they considered important to them while working in peer collaborative groups.

Prague (1988) identified social skills through interviews with 30 students and through the administration of questionnaires to 465 students and 6 teachers. The teachers were trained prior to the study.

Specific socialization skills identified by both students and teachers included cooperating, listening, explaining, involving everyone, being

courteous, and being patient. Prague (1988) reported that junior high school students required similar socialization skills while working in cooperative learning groups.

The Prague study (1988) relied on self-reported data from students to confirm the hypothesis. A second source of data collection was the teachers. Perhaps a more rigorous triangulation method of data collection may have included researcher observations and audio and/or video tape recordings to further verify the findings. More studies of cooperative learning and socialization may answer questions regarding how students are socially accepted in the classroom (Madden, 1980).

The Madden Study. Madden (1980) studied the effects of cooperative learning on the social acceptance of mainstreamed academically handicapped students. In this study, a cooperative intervention was compared to a control group. Each teacher in the study taught a cooperative group and a control group for a period of seven weeks. The classes were randomly assigned to treatment.

Madden (1980) examined the relationships between children with learning problems and their peers in a team learning situation. Heterogeneously grouped learning teams consisted of 4-5 members. Low ability and high ability students could contribute equally to the team task. The reward for good performance was for the team to be named in a weekly newsletter.

Madden's (1980) findings indicated that mainstreamed academically handicapped students in the cooperative groups were less frequently rejected than mainstreamed academically handicapped students in the control groups.



In addition, the findings indicated that students' achievement and self-esteem were more enhanced in the cooperative groups than they were in control groups. The researcher suggested that socialization and friendship were key factors. Madden (1980) recommended that more research be done to investigate the effects of socialization and friendship on self-esteem and achievement. One such study is the Stenberg study (1981).

The Stenberg Study. Stenberg (1981) investigated the effects of friendship, gender, and communication on cooperative behavior. The 104 subjects were first and second graders in two elementary schools, with a mean age of 7 years 6 months. A survey was administered prior to the learning experience and again, two weeks later to assess friendship among the subjects. Dyads were assigned as (a) friends, each child named the other on both occasions, or (b) non-friends, neither child named the other as a friend.

Analysis of the data revealed that males made significantly more choices than females; males tended to have wider friendship groups than females. Block towers were built by groups in order to establish group performance cohesiveness. Male non-friendship groups built higher block towers than female non-friendship groups.

Cooperative performance was gauged in terms of the total number of blocks per tower. A tower was a stack of blocks. The score was taken after a 15-second time interval. The investigator noted that the block towers that tumbled over oftentimes received the same score as those towers which were built with a minimal number of blocks. Because of procedural limitations, major hypotheses were not supported -- much like the Kenderski study(1983).

The Kenderski Study. Kenderski (1983) conducted a study which examined the effects of group interaction, or socialization, on achievement and attitudes. There were 33 third-grade minority subjects. Groups were comprised of 3-4 members. Groups were audio-tape recorded for two ten-minute sessions on two different days.

According to Kenderski's (1983) observations, variables significantly relating to achievement were group composition, sex, individual competition, interaction, or socialization, and attitude toward mathematics. Ethnic background and self-esteem did not affect achievement.

Variables significantly relating to group interaction were individual cooperation, individual competition, individualization, ethnic background, self-concept, and attitude toward mathematics.

Kenderski (1983) found that interactive behavior was not stable over time for individuals or for groups. In addition, she warned that there is need to clearly define the constructs being measured by cooperation, competition, and individualization scales. Further research is necessary to understand group process and socialization and the effects on achievement. Socialization may impact achievement (Pappas & Brown, 1987).

The Pappas and Brown Study. Pappas and Brown (1987) conducted a case study of a preschool child and found that an essential factor in becoming socialized to linguistic patterns is through developing an understanding of the workings of written language. According to Pappas and Brown (1987), students learn to adjust their linguistic choices to fit the needs of social context to which such choices are bound. Pappas and Brown (1987) suggest that children learn to adjust linguistic choices by written language read aloud.

The child who was studied by Pappas and Brown (1987) was read to and then given books to read, which she pretended to read by emulating the readers who read to her. The researchers generalized that the more read aloud experiences a student has, the more socialized he/she becomes because of an increased familiarity with the ways in which authors organize their linguistic messages.

The Pappas and Brown (1987) study examined only one child, which restricts generalizability, as well as replication. While the case study has merit, it may benefit from other studies for reinforcement.

Summary: The aforementioned studies addressed issues surrounding peer collaboration and socialization. These issues included attitudes about self and others, achievement, social skills, social acceptance, friendship, gender, communication, and linguistic patterns. While there has been research which suggested that there is a no difference factor in peer collaboration and socialization, there has been research which suggested otherwise. More research is necessary to investigate the question: What are the effects of peer collaboration on the socialization of students?

#### Peer Collaboration and Student Attitudes

Slavin (1985a; 1985b) posited that peer collaboration may have positive effects on students' attitudes toward writing. In his book entitled Cooperative Learning, Slavin (1985b) underscored the effectiveness of group learning. He asserted that when students spend much of their class time working in four- to six-member heterogeneous groups, they achieve more and experience improved attitudes about themselves, their peers, and school.

To illustrate his theory, Slavin (1985b) cited a study conducted by Slavin, Leavey, and Madden (1984). The study investigated the effects of cooperative learning on attitudes of peers toward mainstreamed academically handicapped students in mathematics. These researchers studied 504 students in grades 3, 4, and 5.

The students were in six schools and 18 classes, located in a middle-class suburban Maryland school district. Schools were assigned randomly to one of three conditions: Team-Assisted Instruction (TAI), Individualized Instruction (II), and Control.

The TAI students worked in teams on worksheets for team scores and certificates. The II students used the same materials as the TAI students, but the II students worked alone. Control students worked in traditionally group-paced instruction, with small homogeneous teacher-directed math groups.

A pre- and post peer-rating form was given by the researchers to assess the acceptance and the rejection of mainstreamed students. A class list was given to each student who was asked to mark each classmate as best friend or okay. Analyses of covariance for the academically handicapped subsample revealed that TAI students were more accepted than control. There were no significant differences between TAI students and II students. An explanation for this occurrence might be that II students do not work in competition with other students. The individualization might reduce rejection between peers, while cooperation might enhance acceptance between peers.

In his book, Slavin (1985b) advocated that cooperative learning structures must be founded on sound psychological and pedagogical theory. In addition, he suggested that cooperative classroom practice be rigorously

evaluated by both practitioners and researchers to examine the effects of the instructional method on students' achievement and attitudes. The studies that follow address peer collaboration and students' attitudes.

The following studies investigated some of the issues concerning collaborative learning. These studies were selected for review from a limited body of research literature on peer collaborative learning and students' attitudes. Further, the following studies on peer collaborative learning and students' attitudes were selected because they underwent rigorous research methods.

The McCollum Study. McCollum (1988) examined the effects of peer collaboration on an Algebra II class. McCollum studied two similar Algebra II classes for three weeks. One class of 24 students was taught using the lecture method of instruction; one class of 26 students was taught using the collaborative method of instruction.

Slavin's (1985b) Student Teams-Achievement Division Model (STAD) was adapted for this study. In the STAD cooperative learning method, students are grouped into four- or five- member heterogeneous learning teams. Teams consist of high, middle, and low ability students, male and female, and students of various racial or ethnic backgrounds. Each team represents a microcosm of the entire class. Students work together on worksheets to achieve team scores.

At the beginning of the study, a teacher-researcher developed pretest of 25 items was administered to measure achievement. At the conclusion of the study, a teacher-researcher developed posttest of 25 items was administered to measure achievement. To assess students' attitudes a questionnaire was

administered at the end of the treatment. Results indicated that the lecture method of instruction produced higher achievement scores, although the collaborative method of instruction produced more positive attitudes.

McCollum (1988) recommended the development of additional materials for further research. Moreover, another source of data collection might have been through observations to note students interactive patterns. Their interactive patterns may have provided some answers as to why the achievement tests scores were different.

The Davis Study. Finding similar results that McCollum (1988) found, Davis (1988) studied the effects of peer collaboration on student achievement and attitudes in mathematics for 75 days, for 43-minute periods. The study was designed to investigate whether or not there are significant differences in attitude and achievement in students who use group process skills of think aloud and summaries.

Subjects included 104 seventh grade students of average ability. There was a treatment group and a control group; both groups were instructed peer collaboratively. In a series of group cooperative lessons, the treatment students were asked to think aloud and orally summarize lessons.

Achievement and attitudes were measured at the end of a 25-day problem solving unit. Achievement was measured by the Iowa Problem Solving Project Tests. Attitudes were measured by a classroom life questionnaire, addressing the following: (a) teacher academic support; (b) teacher personal support; (c) student academic support; (d) student personal support; (e) goal interdependence; (f) resource interdependence; (g)

cooperation; and (h) alienation. The results indicated that there were no significant differences in achievement and attitudes.

The researcher observed the treatment and control groups. He reported that there were differences between the two groups' interactive patterns. The treatment group was more verbal, more interactive, more concerned about others in the group, and more process-oriented, using think aloud means to solve problems.

A pretest at the beginning of the study and a posttest at the end of the 75-day study may have revealed different findings. Further, a follow-up study to examine retention of learned material could be beneficial to research in peer cooperative learning.

The Carney Study. Carney (1988) examined the effects of cooperative learning on the acquisition of keyboarding skills, with a focus on the extent to which students' attitudes toward their peers changed as a consequence of the cooperative learning experience.

Two schools participated in the study, with a total of 119 fourth grade students. At school A, three fourth grade classes participated; there were two experimental groups and one control group. At school B, two fourth grade classes participated; there was one experimental group and one control group.

Keyboarding rate was measured before, immediately after, and ten weeks after the keyboarding unit. A questionnaire was administered before and after the keyboarding unit to measure students' attitudes toward their classmates.

The results showed no difference between students learning in a cooperative classroom structure and students learning in a traditional

classroom structure. The results showed no difference in students' attitudes in the cooperative group and the traditional group. However, keyboarding skills may be more motor skill dependent and may be less affected by cooperative learning than a discipline emphasizing conceptual skills. The motor skill dependency of keyboarding in computer courses may limit peer interaction. On the other hand, perhaps the peer cooperative method of instruction had no significant effect on CAI students (Tanamai, 1989).

The Tanamai Study. Tanamai (1989) investigated the comparative effects of cooperative and individualistic uses of computer-assisted instruction (CAI), in regard to achievement and attitudes.

Sixty-two undergraduate Fine Arts students participated in this three-week study. Students' participation was based on matched scores on pretests. Students were assigned to cooperative and individualistic instruction through random selection. Cooperatively instructed students worked in small groups in the Design Basic Studies course. Individualistically instructed students worked alone in the Design Basic Studies course.

Pre- and posttests indicated no differences in achievement. In addition, pre- and posttests indicated no differences in attitude toward computer use between cooperative and individualistic uses of CAI. Students' attitudes toward method of instruction were not assessed. In terms of achievement, Computer-Assisted Instruction with cooperative learning was not significantly different than Computer-Assisted Instruction with individualistic learning. However, students' preference for method of instruction may have added a beneficial dimension to the study.



The Kacer Study. Kacer's study (1989) did measure students' attitudes toward method of instruction. Kacer (1989) examined the impact of small group instruction on attitude and achievement of students learning computer applications. She asked two questions in the study: How does small group learning of computer applications affect individual achievement? How does small group learning of computer applications affect individual attitudes?

Subjects involved forty-nine students randomly selected to work as members in dyads or individualistically. Three computer applications were demonstrated in class during each of the three consecutive weeks: wordprocessing, spreadsheets, databases. After each demonstration, the students met in their respective instructional condition (dyads, individuals) to complete an assigned task. A performance test was administered after each of the three units.

Results indicated that there was no difference in performance between students working in dyads and students working individualistically. Further, questionnaires were administered before and after instruction to measure students' attitudes toward the computer and instruction. Results indicated no significant difference.

The no difference factor may be a direct consequence of the subject matter, rather than the methods of instruction. As mentioned previously, computer instruction may involve more motor skills of the student, which may be acquired more individualistically. Further investigation may answer emergent questions regarding cooperative learning and students' attitudes.

The Lang Study. Lang (1983) studied the use of cooperative learning to determine if the use of Slavin's Teams-Games-Tournament (TGT) would increase academic achievement and improve attitudes toward economics among college students. TGT is a group method of instruction which involves worksheets and academic games to master subject matter. Team members compete with opposing groups at tournament tables where there is a reader of questions.

Subjects involved sixty students in an intact class of microeconomics. Tests to determine ability level of the groups indicated that the groups did not differ. Students were randomly assigned to two groups. A post-test was administered to the thirty students in the control group (lecture) and to the thirty students in the experimental (TGT) group.

Students participated in the study for a ten week quarter. All students met together for a class lecture until the fifth day. Then students were divided into two groups: the TGT group and the control group. The TGT group participated in cooperative learning, using team study and competition. The control group participated in the study using the same study materials on an individual basis for lecture-discussion.

Achievement was measured by a 50-item modified version of the Test of Understanding College Economics. Attitude toward economics was measured by a 20-statement Likert-new survey, Survey of Attitude Toward Economics. Findings indicated that Slavin's TGT had no significant effect on achievement or attitudes.

Lang (1983) stated that the small sample size resulted in too few people in each ability group and unequal cell frequencies. This may have caused the

lack of Slavin's TGT treatment effects. According to Slavin (1990), TGT should enhance achievement and attitudes.

The Slavin and Karweit Study. Slavin and Karweit (1984) examined the effects of three instructional methods on mathematics achievement and attitudes.

The three instructional methods included an individualized model, Team-Assisted Individualization (TAI); an ability grouped model, Ability Grouped Active Teaching, (AGAT); and a group-paced model, Missouri Mathematics Program, (MMP). There was also an untreated control group.

Two randomized field experiments on pupils in grades 4-6 and 3-5 were conducted for 16 and 18 weeks, respectively. An analysis of variance on achievement scores indicated that in both experiments, TAI and AGAT exceeded MMP. Findings on the effects of methods of instruction on attitudes toward math indicated that TAI was favored.

In a later publication by Robert Slavin (1987), he warned that ability grouped class assignment is the least effective form of instruction. Slavin (1987) warned against ability-group class assignment, arguing that it could be a harmful method of instruction because of the narrow attitudes that students develop in homogeneous grouping.

Slavin (1985b) argued that cooperative learning had significant impact on achievement and attitudes, affecting relationships between and among races, sexes, and cultures. Slavin (1980) explained his theory in terms of performance cohesion. Performance refers to individual and group productivity on a given task. Cohesion refers to the affective domain of behavior of students liking one another. According to Slavin (1985b),

students achieve on a given task because they like one another. Slavin (1985b) argued that collaborative learning has positive effects on students' attitudes.

Slavin (1980) explained the no difference factor in research studies results from possible limitations in measurement instruments. Slavin (1980) argued that achievement and attitudes may not have been adequately measured in studies reporting no difference between cooperative learning and competitive learning. According to Slavin (1983), students learn from other students, which can be modeled in the writing classroom. More research is necessary. There are inconsistencies in research findings.

Summary. The aforementioned studies addressed issues surrounding the effects of peer collaboration on the attitudes of students. These issues included achievement, attitudes, and interactive patterns.

Many of the findings of the above studies revealed that peer collaboration has positive effects on students' attitudes, but some of the studies reported no effect. For example, the McCollum study (1988) reported results indicating that the lecture method of instruction produced higher achievement scores -- the collaborative method of instruction produced more positive attitudes. The Kacer study (1989) reported results indicating no difference in students' achievement or attitudes. The Slavin and Karweit study (1984) reported results indicating students favoring peer collaborative learning.

There are inconsistencies in the findings of the studies. There is enough evidence to suggest that peer collaboration and students' attitudes

should be investigated further to address the question: What are the effects of peer collaboration on students' attitudes?

### Chapter Summary

Chapter II reviewed the research literature focused on peer collaboration, peer collaboration and the teaching of writing, peer collaboration and socialization, and peer collaboration and students' attitudes.

The literature on peer collaboration examined some of the issues surrounding peer collaboration and interpersonal dependence, reward structures, achievement, self-esteem, constructive controversy, and cross-ethnic relations. Many of the studies reported results which indicated that peer collaborative learning may enhance achievement. There remains unanswered questions: Why is collaborative learning successful with some students? When is collaborative learning not successful with some students?

The literature on peer collaboration and writing examined some of the issues surrounding group discussion, attitude toward method of instruction, time on task, and achievement. Many of the studies reported results which indicated that peer collaborative learning may have positive effects on the quality of students' writing. However, the limited number of studies of peer collaborative learning and writing render the results of the literature reviewed in this chapter inconclusive. There remains the question: What are the effects of peer collaboration on students' writing?

The literature on peer collaboration and socialization examined some of the issues surrounding attitudes about self and others, achievement, social skills, social acceptance, friendship, gender, communication, and linguistic

patterns. While some of the research results indicated that peer collaboration enhanced socialization, some of the results indicated a no difference factor. The inconsistencies of the results heighten the question: What are the effects of peer collaboration on the socialization of students?

The literature on peer collaboration and students' attitudes examined some of the issues surrounding achievement, attitudes, and interactive patterns. Some of the research results indicated that peer collaboration may enhance students' attitudes, but again, there were inconsistencies in the findings. Further research is necessary to address the question: What are the effects of peer collaboration on students' attitudes?

Chapter II reviewed the research literature focused on peer collaboration, peer collaboration and the teaching of writing, peer collaboration and socialization, and peer collaboration and student attitudes. Chapter III will present the methodology used to investigate the effects of peer collaboration on community college freshmen's writing, on their socialization, and on their attitudes toward writing.

## CHAPTER III

### Methodology

The purpose of this chapter is to present the methodology used to investigate the effects of peer collaboration on the quality of college freshman composition students' writing, on their socialization, and on their attitudes toward writing. The data collected were elicited from four sources: the students, the key informant, the teacher, and the observer. This triangulated method of inquiry was adopted for data collection to clarify, verify, and reinforce the interpretation. Data were utilized to reveal emergent patterns of socialization of students with students and students with the teacher, affecting the quality of writing and attitude toward writing. The various techniques and instruments used to gather and interpret the data are described in the chapter as follows: (a) statement of the research questions; (b) design; (c) population; (d) procedures; (e) instruments and materials; (f) validity and reliability; (g) analysis, synthesis, and interpretation; (h) and pilot study.

#### Research Questions

Three questions were asked in this study:

1. What are the effects of peer collaboration on the quality of community college freshmen's writing?
2. What are the effects of peer collaboration on the socialization of community college freshman composition students?

3. What are the effects of peer collaboration on community college freshmen's attitudes toward writing?

#### Design of the Study

The study was designed to gather data relative to the effects of peer collaboration on the quality of community college freshmen's writing; the effects of peer collaboration on the socialization of community college freshman composition students; and the effects of peer collaboration on community college freshmen's attitudes toward writing.

The researcher chose an intact composition class to study. The class was typical of other composition classes at the college and yielded important data.

#### Attitude Survey

Pre- and Post-surveys were administered to students participating in the peer collaborative composition course at the beginning and end of the semester. The pre- and post-surveys were exactly the same survey, except the pre-survey was labeled Survey A; the post-survey was labeled Survey B (see Appendix A, pp. 159-160). The survey was designed to elicit students' attitudes toward writing.

#### Writing Samples

Writing samples in the narrative mode were obtained from all students at the beginning and end of the semester. The narrative mode was a pattern of development taught in the standard curriculum. Prompts used



were similar to those utilized in the Maryland Functional Writing Test, in that they were simple, directive, and topic-specific (see Chapter IV, p. 122).

Procedure. The procedure for scoring was practiced by two raters on 30 pieces of student writing samples similar to the samples used in this study. Training of the raters was conducted by an active member of the Northeast Regional Conference on Teaching English in the Two-Year College, who had trained under Lee Odell. Training time was 4 hours. Raters did not mark corrections on the paper. Spending no more than two minutes on each writing sample, the raters achieved an interrater reliability of .90. Raters were given 10 anchor papers to rate, and 9 times out of 10 they reached a consensus. Consensus between the raters was achieved by assessing a writing sample on the items listed in the modified analytic scale.

Holistic Scoring. Writing samples were scored holistically by two raters, using a modified analytic scale modeled after Cooper and Odell's (1977). The scale listed prominent characteristics of writing in the narrative mode. The characteristics ranged from 0-4 points and were described in some detail. These points were identified along a scoring line for each characteristic (see Appendix B, p. 166).

Holistic scoring is a "guided procedure for . . . ranking written pieces" (Cooper & Odell, 1977, p. 3). Holistic scoring remains controversial because it occurs impressionistically. However, holistic scoring was the preferred method of measurement over a machine-scorable objective test or a frequency count of word or sentence elements, because a human respondent is a natural link to writing. Moreover, Cooper and Odell (1977) argued that a

machine-scorable objective test may measure editorial skills, rather than writing skills.

Validity. According to Cooper and Odell (1977), holistic scoring is a valid instrument of measurement, because scores are based on actual student writing samples. Raters responded impressionistically to student writing samples and reached a concensus about the assigned scores. Raters' responses were guided by a list of prominent writing characteristics. The holistic rating scale was designed to check a student's writing for clarity, diction, organization, and punctuation.

Reliability. The procedure for scoring was practiced by two raters on 30 pieces of student writing samples, similar to the samples used in this study. Raters did not mark corrections on the paper. Generally, spending no more than two minutes on each writing sample, the raters achieved a scoring reliability of .90. Scores were indicated for the levels of writing ability denoted on the rating scale: 0 indicated a limited to no ability level; 1 indicated a low ability level; 2 indicated an average ability level; 3 indicated an above average ability level; and 4 indicated a high ability level.

### Key Informant Interviews

Three informal, impromptu interviews were conducted with a key informant, a selected student, who freely interacted with peers and the teacher. The key informant was a student who was willing to participate in interviews with the researcher, because she wanted to learn more about the research process (see Appendix D for interviews, p. 224).

### Observations

Out of a total of 30 class sessions, eleven class sessions were observed and audiotaped by the researcher. Recorded on paper and audiotape were student-student interactions, student-teacher interactions, and teacher-student interactions (see Appendix C for transcripts, p. 169). The eleven class sessions were selected because of the particular topics of writing instruction (see Appendix E for syllabus, p. 238). Other class sessions were not selected because of guest speakers and library tours, etc.

### Analysis and Synthesis

All data collected were analyzed and synthesized to determine emergent patterns of student-student socialization, student-teacher socialization, and teacher-student socialization which may have affected the quality of students' writing and students' attitudes toward writing. Recurrent themes were noted and labeled under specific categories. Each category represented an approximate percentage of the observation notes. Percentages were derived from subjective demarkation of the number of sentences, which demonstrated specific themes.

### Validity and Reliability

Validity and reliability were achieved through triangulated data collection. Interviews were conducted with a key informant student, at least three other students, and the teacher to address emergent themes within the classroom. Observation notes were recorded on paper and audiotape.

## Population/Setting

### Students

A small population, an English composition class at a rural community college, was chosen to be studied in some depth. There were five males and ten females in the class. There were three black females; the rest of the students were white. An undetermined number of students were JTPA students. The mean age of the class was 31.

The study was conducted at a small rural community college; all students attending the community college were commuters. The college was built for the purpose of serving a five-county area of commuters in the "traditionally strong liberal arts and sciences, career, occupational, and technical curricula . . ." (College Catalog, 1987-88, p. 4). The total student population was 2,023 in January 1988. The total number of freshmen attending the college during the fall 1987 was 1,417. Entering college students were not required to take an ACT or SAT test.

The college for this study was selected because of an educational interest that the researcher possessed for a rural community college, which serves many students from rural families. In addition, the researcher taught at the college and had access to classroom research. This researcher noted that a majority of the students at the College must work in order to pay tuition and commuting expenses, which oftentimes precludes much peer socialization. Students attend class and, in most cases, leave campus immediately after class to go to work. Class time is usually the only

opportunity for most students to socialize with their peers at this rural community college.

The College programs are divided into two major categories: Career Programs and Transfer Programs. Most transfer students continue their studies at Salisbury State University and University of Maryland. Other transfer students continue their studies at Towson State University, Washington College, and colleges outside the state of Maryland.

The College programs are taught by 38 full-time teaching faculty. The number of faculty holding Doctoral degrees is 14; the number of faculty holding Master's degrees is 21. Three full-time faculty hold certification in their respective areas of expertise. Adjunct faculty are appointed on a semester-by-semester basis.

### Instructional Method

The class for this study was selected because of the use of peer collaboration. Generally, English composition was taught as a lecture course; however, the college was seeking alternative methods for teaching composition in order to address the serious writing deficiencies characteristic of college students across the nation. The number of students taught, using the lecture method of instruction as the primary teaching strategy, was generally 30. The number of students taught using the peer collaborative method of instruction was reduced to 15 in order to accommodate peer collaboration as the primary teaching strategy. A peer collaborative teaching strategy relies upon student interaction for composition instruction.

### Course

"English Composition 101" was a freshman level composition course required by all degree programs. The English faculty designed this composition course, which was a course that adopted the process approach for teaching students how to write themes. Using a step-by-step approach, students were taught to write in the following modes of discourse: narration, description, compare/contrast, process, definition, and persuasion. In addition, students were required to write an expository research paper in which they incorporated many of the skills they learned to use in the various modes of discourse. A step-by-step approach was likewise used to teach students how to conduct library research for the purpose of writing an expository research paper. Students were required to turn in bibliography cards, note cards, a topic outline with thesis statement, and at least two drafts of the paper. The course was designed to prepare students for writing in other college courses, as well as for writing in their respective careers.

### Study

The study was designed to gather descriptive data of a small, rural sample of a community college composition class. An intensive study of a small sample may benefit the population being studied, yielding internal validity, and may have additional benefits as a model for replication with other similar populations. Although generalizability is limited by this study, because of a small sample, detailed, more specific information is an important advantage. For this purpose, this researcher chose a small sample of a population to study in some depth for one college semester.

### Teacher

There were three full-time faculty in the English department at the College. The three English faculty held Master's degrees. The teacher who used the peer collaborative method of instruction was one having 15 years of composition teaching experience at the community college level. She received an A.B. degree in 1966 in English and Religion. She received an M.A. degree in 1970 from a major university, where she majored in English. She earned 15 credits beyond her M.A. in English and Education. She agreed to participate in the pilot and the present study in order to contribute to the advancement of composition research.

### Instruments and Materials

#### Attitude Survey

One survey form, modeled after Spradley's (1979) and White's (1986), prescriptions, was developed for the purpose of this study (see Appendix A, pp. 159-160). The same survey was administered at the beginning and end of the semester, Survey A and Survey B. The results were compared at the close of the semester.

The survey was designed to elicit students' attitudes toward writing before and after the peer collaborative learning experience. In addition, data regarding sex, race, age, G.P.A., income per year, expected grade in the course, and attendance were elicited from students on the survey. The statements were worded so that they would not prompt the student to answer in any prescribed way.

Validity. The survey was checked for validity by two composition teachers, each having ten years of teaching experience, a director of institutional research, and a former director of institutional self study, currently a vice president of a community college. The survey was deemed to have face validity, since it purported to measure attitude toward writing, dealing with relevant content in this area.

Reliability. The survey was checked for reliability, or repeatability, in a pilot study of composition students similar to those in this study. Results were comparable from both samples of the population.

### Writing Samples

Writing samples were obtained from the students at the beginning and at the end of the course. The writing samples were written in the narrative mode. Prompts used were similar to those utilized in the Maryland Functional Writing Test, in that they were simple, directive, and topic-specific.

Holistic Scoring. Writing samples were scored holistically by a panel of two raters who had at least five years of composition teaching experience. The raters were impartial, disinterested parties who agreed to participate in this study for the purpose of advancing educational research.

### Key Informant Interviews

Interviews were developed from observational notes taken by the researcher from the course objectives, textbooks, class sessions, and student writing samples. Sources such as Spradley's (1979) The Ethnographic



Interview, and Spindler's (1982) Doing the Ethnography of Schooling were consulted. Interview questions were designed to obtain information in both direct and indirect ways. Interviews were held with a key informant, a selected student, at the beginning, midway through, and at the end of the course.

### Observation Forms

The forms (see Appendix C, p. 169) which were used for recording observations, by the researcher, were structured in accordance with those prescribed by Spradley (1979), and White (1986). The form was structured with two columns, headed Observation and Interpretation. When patterns began to emerge, the form was versatile to allow specific items to be checked which were relevant to this study.

An open-ended category system was devised whereby any observation could be categorized as being essentially either student or teacher behavior, and then designated as verbal or nonverbal, positive or negative. At the end of the form space was allotted to accommodate observer comments and insights. The observer reported anything that she believed was relevant to this study of peer collaboration and its effects on the quality of students' writing, on the socialization of students, and on students' attitudes toward writing.

The observation form was kept simple in order that a detailed record of verbal and nonverbal responses by each student and the teacher could be maintained. Further, the simple form permitted a wide range of themes to

be recorded, such as what students said to one another, what students said to the teacher, what the teacher said to students, the tenor of the statements, and even if the teacher and students referred to one another by first name, last name, or by a sobriquet. Details recorded on the observation form were compared with the results of other instruments and materials utilized in this study.

### Researcher

The researcher was the classroom observer and participated in this study, being a primary instrument for data collection. She had ten years of composition teaching experience. She held a Bachelor's degree in Education with a concentration in English, a Master's degree in English, and was working toward a doctorate in Education. The researcher was a primary instrument for collecting, analyzing, and synthesizing data.

While it was not the intention of the researcher to impose a set of normative standards on this study, she brought to this study many assumptions of what is effective student-student, student-teacher, and teacher-student interaction. These assumptions formed a backdrop for this study and interpretation, but they by no means imply that there is any one way to interact effectively in the classroom. Conversely, a strong personal voice brought to this study was a conception of worthy educational practice. Caution was taken to record and describe the reality of the classroom under study having to do with student socialization as it may have affected the quality of students' writing and their attitudes toward writing.

## Procedures

### Peer Collaborative Method

Single Group. The peer collaborative method of instruction studied contrasts many of the previous studies of group instruction in that there was a single group of 15 students, with unplanned subgrouping. The teacher assumed the role of task facilitator, guiding the group into discussion which primarily was student-dominated.

Writing Assignments. Students were given writing assignments listed on the course syllabus (see Appendix E, p. 238), which the teacher briefly introduced in class. Most writing assignments were written outside of class, since class time mainly was devoted to each student reading his/her own writing to the group, while the other group members followed along on a photocopy, provided by the writer. Immediately following the reading, group members discussed the strengths and weaknesses of the essay. Moreover, each student was responsible for presenting constructive criticism to peers, orally and in writing. While students read essays silently, they jotted down brief comments to be discussed immediately after the reading.

Seating Arrangement. During the readings and discussions, students sat in a circle so they faced each other. The teacher also sat in the circle, as a facilitator to involve students in a predominantly student-oriented class discussion, hence the peer collaborative method of instruction. The peer collaborative method of instruction with a single group and facilitator is a unique teaching strategy, since most peer collaborative classes are divided into two or more groups functioning simultaneously.

### Observation

Eleven Classes. During the 15 weeks of a semester, there were two one and a half hour sessions of class time scheduled per week for English Composition 101. The English composition course met two days a week, Tuesday/Thursday, for a total of 30 class sessions. Eleven of the 30 sessions were selected to observe, based on the objectives for instruction of the various modes of writing which were delineated on the course syllabus. During each observed session, notes were taken in log format on the socialization relative to the quality of students' writing and students' attitudes toward writing. Notes taken were clarified by an audiotape recording of the 11 observed sessions.

### Validity and Reliability

#### Attitude Survey

The survey was constructed for the purpose of this study (see Appendix A, p. 157). The survey was designed to elicit students' attitudes toward writing before and after the peer collaborative learning experience. The survey administered to the students, adopted from a Likert-type scale, was designed to reflect change in students' attitudes toward writing. Statements on the survey were generated by the English faculty at the community college.

Validity. The survey was checked for validity by two composition teachers, each having ten years of teaching experience, a director of institutional research and a former director of institutional self study, currently a vice president of a community college. The survey was deemed to

have face validity, since it purported to measure attitude toward writing, dealing with relevant content in this area.

Face validity "refers to the evaluator's appraisal of what the content of the test measures" and directly impacts upon the interpretation of the data (Borg & Gall, 1983, p. 276). Face validity is a subjective evaluation of the items or content of a measurement. A panel of four experts deemed the attitude survey to have face validity.

Reliability. The survey was checked for reliability, or repeatability, in a pilot study of composition students similar to those in this study. Results were comparable from both samples of the population.

### Writing Samples

Writing samples were scored holistically by two raters, using a modified analytic scale designed by Cooper and Odell (1977). The scale listed prominent characteristics of writing in the narrative mode. The characteristics ranged from 0-4 and were described in some detail. These points were identified along a scoring line for each characteristic. (See Appendix B, p. 166).

Holistic Scoring. Defined by Cooper in the preface of Cooper and Odell (1977), holistic scoring is a "guided procedure for . . . ranking written pieces" (p. 3). Holistic scoring occurs impressionistically. The procedure for scoring was practiced by two raters on 30 pieces of student writing samples similar to the samples used in this study. Nine out of ten times, the raters agreed on the writing scores.

Other times the raters discussed the writing and arrived at a consensus. Raters did not mark corrections on the paper. Generally spending no more than two minutes on each writing sample, the raters achieved a scoring reliability of .90.

Validity and Reliability. Holistic scoring was the preferred method of measurement over a machine-scorable objective test or a frequency count of word or sentence elements, because a human respondent is a natural link to writing (Cooper & Odell, 1977). Further, holistic scoring is a valid method of measurement in that scores are based on actual student writing samples. The holistic scoring method of measurement was practiced on 30 composition students' writing samples by two raters. The raters found similar results. Therefore, the holistic scoring method of measurement was determined to have reliability.

#### Interviews/Observations

Interviews with students and classroom observations were also methods of data collection. Informal interviews were conducted with a key informant, a student freely interacting with peers and teacher, who was willing to report information to the researcher. In addition, informal, impromptu interviews were conducted with at least three other students and the teacher. Observations were conducted during eleven of the thirty class sessions for collecting information relevant to peer collaboration and its effects on the quality of students' writing, on their socialization, and on their attitudes toward writing.

Analysis of Observations. In addition to observations, the researcher conducted analysis of the number of sentences in the observation notes. The purpose of this analysis was to provide an approximate assessment of the proportion of sentences devoted to emergent themes.

### Triangulation

Surveys, writing samples, interviews, and observations are components of *triangulation*. According to Wolcott (1977), effective fieldwork, ethnography, depends on "triangulation" which is often referred to as the "multi-instrument approach."

The need for verification is everpresent in an ethnography to determine how the data collected ties in with existing knowledge and theory. Validation of significant propositions can result from a multi-instrument or a multi-perspective approach to collecting data. Triangulation is a validating procedure to affirm that the data are demonstrably empirical.

For example, the results of the writing samples were tested against the perceptions of the teacher; the perceptions of the teacher were tested against the perceptions of students; the perceptions of students were tested against perceptions of the observation records: notes and audio recordings.

Consensus. A consensus, derived from data collected, using the multi-instrument approach, bears impact upon the repeatability or reliability of the work. The results of the survey were compared with interview and observational notes to verify whether the measure discriminated adequately, thus determining the reliability of the measurement. These varied methods

of collecting and analyzing data are referred to as triangulation, which aids in ruling out some of the extraneous factors which can confound a study. Because of the nature of an ethnographic study, replication and generalizability are impaired.

There are questions such as: Would another researcher have reached the same conclusions about the same classroom culture? Would another researcher, analyzing only the raw data, reach the same conclusions? The field researcher must view a social reality which is infinitely complex. While evidence may support internal validity, external validity is limited in that each researcher will view a classroom culture from a different angle (Miles & Huberman, 1984).

The written interpretation is the result of analysis and synthesis of valid and reliable data, derived from what the researcher understood to be a reality of the classroom culture, to defend a proposition scheme, an hypothesis.

### Analysis, Synthesis, and Interpretation of Data

#### Qualitative Research

Analysis, synthesis, and interpretation of data result in educational criticism. Educational criticism has three major components: description, interpretation, and evaluation. Though logically distinct in theory, these three components are rarely distinct in practice.

For instance, what a researcher chooses to describe is partially dependent upon an evaluative judgment of what he/she deems worth



describing (White, 1986). Data collected in a study are a final analysis of a complex interaction among three major components of criticism. Descriptive data of qualitative research do not simply appear before the researcher. In essence, they are inferred.

Qualitative research yields rich data which can be confirmed, tested, and substantiated. Miles and Huberman (1984) asserted that "concepts without corresponding facts are hollow, just as facts without concepts are, literally, meaningless" (p. 229). Miles and Huberman (1984) argued that researchers should use an eclectic method of data collection, which utilizes various methods of analyzing, synthesizing, and interpreting data.

### Researcher

The researcher analyzed, synthesized, and interpreted data exploring what they meant and if and how they may bear implications for further study. There was a focus on transcribing observation notes and listening to audiotaped sessions of peer collaborative classes, with attention to notes taken during the student interviews and notes taken on pre- and post-collaboration writing samples and surveys.

An effort was made to discern salient educational themes in the classroom as a culture. This process of reflection was not linear, but recursive. That is, earlier data were studied against data collected in the latter stages of this study. Earlier data were discarded when deemed irrelevant to

emergent themes and an hypothesis, which presented themselves in the latter stages of this study.

Because of the exploratory nature of ethnography, the researcher's perspective may have changed because of time spent in the classroom (Spindler, 1982, p. 28). Clarity of themes and an hypothesis were wrought at the expense of time and energy spent on taking notes, analyzing them, synthesizing them, and interpreting them. Such is the nature of ethnographic research, which seeks to discover what salient generalizations are extant in a classroom culture for the purpose of highlighting implications for educational improvement.

### Pilot Study

During the Spring semester of 1988, a pilot study was conducted of an English Composition 101 class which consisted of one teacher and 15 students.

Teacher. Three interviews with the teacher were conducted immediately before, during, and immediately following the semester to gain a perspective on her thoughts and feelings regarding peer collaboration. She reported that such a teaching method required more time than the English Composition 101 lecture courses in that she spent much time personalizing the course to fit the needs of the individual students, while recognizing the need to maintain high standards. She noted that there was much pressure to pace the course to fit the 90- minute time constraint of each class session, since class sessions were discussion sessions which had no outlined

beginning, middle, and end as might a lecture course. Moreover, she expressed concern about student affective needs, which required the sensitivity of an alert facilitator who must redirect the focus of the discussion if a student felt overwhelmed by the analysis of his/her writing. By the end of the semester, the teacher believed the peer collaborative experience to be a profitable one for the students and, therefore, a worthwhile investment of her time and efforts.

Procedure. Students were required to write most of their essays outside of class, since class time was devoted to reading students' writing and analyzing it. Individual writers read their own essays aloud while other students read silently, marking strengths and weaknesses of the essay. Immediately following the reading, 2-3 minutes were given for the students to reread and analyze the essay. On a volunteer basis, students then proffered comments about the essay read.

Survey. Survey A revealed a mean score of 3.1; Survey B revealed a mean score of 4.4. While student survey respondents initially indicated apprehension about participating in a peer collaborative learning environment, follow-up surveys reflected that students enjoyed the experience and that they believed their writing had improved because of it. Some students said they would be reluctant to recommend the method of instruction to others unless those students understood its intensity. When asked if they believed other students could benefit from a peer collaborative learning experience, most students replied "strongly agree." Most believed that because of the instructional method, their writing received more

instructional time and that the instruction was more individualized than in lecture courses. A limitation of the peer collaborative experience was that students felt they were under pressure to perform each day, because of the small number of students in the class. Many students wrote under the "comments" section that they would recommend the peer collaborative class only to students who really wanted to learn to write.

Writing Samples. Writing samples were taken from the students at the beginning and end of the semester and scored holistically. The average score was 2.1 at the beginning and 2.2 at the end of the semester. While there did not appear to be any major difference, it should be noted that holistic scoring affords a minimal view of change. Difference reflected more visibly in the surveys eliciting students' attitudes toward writing.

Key Informant Interviews. The key informant provided an additional perspective to the researcher. The key informant reported that initially, students were uncomfortable with peer collaborative learning, feeling "put on the spot," but after the third week of classes, students seemed to relax. Students arranged their desks in a circle at the outset of every class. By the third week, the circle became smaller. The key informant reported that there was less apprehension about volunteering to give constructive criticism. By the end of the semester, all but one student eagerly participated in the democratic, active learning method. However, other students, according to the key informant, cajoled him into participating.

Observations. At the beginning of the semester, the researcher observed that students appeared reticent about actively participating in the peer collaborative learning experience. After the third week, students appeared to be more socially interactive, and they actively participated in the learning experience. Students participated in discussion about the writing assignments, without visibly having to be coerced by the teacher. By the end of the semester, students appeared to be cohesive, in that they laughed with one another and openly discussed topics about their writing, as well as their personal lives.

Analysis and Synthesis. Students reported that they enjoyed writing much more by the end of the semester than at the beginning of the semester, because of the audience's role in building their confidence and writing skills. By the end of the semester, only one student was no longer in attendance, attesting to low attrition. The pilot study justified its worthiness in that the quality of student writing improved and students' attitudes toward writing improved. Students claimed that these changes were the result of the active participation offered by a peer collaborative method of instruction, since they actually read their own writing to an audience of peers. In addition, the audience of peers responded, offering immediate feedback about the writing. Further investigation of a similar population could add more insight into what happens in a peer collaborative classroom and how it affects the quality of student writing, the socialization of students, and students' attitudes toward writing.

### Chapter Summary

Chapter III presented the methodology used to gather descriptive data for investigating the effects of peer collaboration on the quality of college freshman composition students' writing, on the socialization of students, and on their attitudes toward writing. Chapter IV will report the analysis of the data collected from the investigation.

## CHAPTER IV

### Data Analysis

The purpose of this chapter is to analyze data collected from the investigation of the effects of peer collaboration on the quality of community college freshman composition students' writing, on their socialization, and on their attitudes toward writing. Three questions were asked in this study:

1. What are the effects of peer collaboration on the quality of community college freshmen's writing?
2. What are the effects of peer collaboration on the socialization of community college freshman composition students?
3. What are the effects of peer collaboration on community college freshmen's attitudes toward writing?

Data were collected from four sources: the students, the key informant, the teacher, and the observer. The various techniques and methods used to organize and analyze the data are described in this chapter under the following categories: (a) survey A; (b) writing sample A; (c) observation notes; (d) audio-taped notes; (e) key informant interviews; (f) survey B; (g) writing sample B; and (h) summary.

#### Attitude Survey A

##### Scale

A survey was administered to the 15 students during the first week of the course to elicit responses which would reflect the students' attitudes

toward writing (see Appendix A, pp. 159-160). In addition, students responded to statements addressing attitudes toward writing frequency, writing in other courses and career, writing as being easy and grades in English, attendance, and peer collaboration.

Survey A provided students' numerical responses, utilizing a scale with a range of 1-5 (1- Strongly Disagree; 2- Disagree; 3- Neither (neither agree nor disagree); 4- Agree; 5- Strongly Agree; and DK- Don't Know). Number 1 indicated a strong dislike for writing, and 5 indicated a strong like for writing. The DK response was counted as having no value.

#### Statement Mean Scores

Statement mean scores are listed under Table 1 (pp. 80-81). The mean of the subjects' responses to statements addressing liking and enjoying writing was 3.15 (.31). Henceforth, standard deviations will be included within parentheses. The mean of the subjects' responses to statements addressing writing frequency was 3.14 (.19). The mean of the subjects' responses to statements addressing writing in other courses and career was 4.13 (.58). The mean of the subjects' responses to writing as easy and grades was 2.69 (.23). The mean of the subjects' responses to attendance was 2.76 (1.20). The mean of the subjects' responses to peer collaboration was 4.13 (.18).

All fifteen student responses were averaged together, except those students who responded DK, for Don't Know. The DK responses were counted as having no value and were not included in the mean scores. The



total mean of the statement mean scores was 3.29 (.66). Table 1 lists actual statements, clustered according to topic, mean scores, standard deviations, and DK responses.

Subject mean scores for survey A are listed in Appendix A, p. 161.

### Analysis of Survey A Responses

Statements 1, 3, 4, 5, 7, 12, 14, and 15 addressed students' attitudes toward writing. The mean score of these statements was 3.15 (.31). There was a total of 11 DK responses.

Statements 9 and 11 addressed students' writing frequency. The mean score of these statements was 3.14 (.19). There was a total of 0 DK responses.

Statements 8, 10, and 19 addressed students' attitudes toward writing in other courses and their careers. The mean score of these statements was 4.13 (.58). There was a total of 0 DK responses.

Statements 2, 13, and 17 addressed students' attitudes toward writing as easy and grades. The mean score of these statements was 2.69 (.23). There was a total of 3 DK responses.

Statements 6 and 18 addressed students' attendance. The mean score of these statements was 2.76 (1.2). There was a total of 9 DK responses.

Statements 16 and 20 addressed students' attitudes toward peer collaboration. The mean score of these statements was 4.13(.18). There was a total of 12 DK responses.

Table 1

Statement Mean Scores on Survey A  
(Standard Deviations are within Parentheses)

<u>Statement</u>	<u>Mean Score</u>		<u>DK</u>
<u>Likes/Enjoys Writing</u>			
1. I like to write essays.	3.29	(.83)	1
3. I enjoy developing paragraphs.	2.77	(.93)	2
4. English courses are enjoyable.	3.13	(.99)	0
5. I enjoy creating transitions.	2.80	(.92)	5
7. I like my peers to read my writing assignments.	2.93	(1.07)	1
12. I enjoy talking about my writing with my teachers.	3.20	(1.31)	1
14. I enjoy talking about topics that I plan to write about.	3.50	(1.16)	1
15. I like my teachers to read my assignments.	3.60	(1.18)	0
	<hr/>		
Mean	3.15	(.31)	11
<u>Writing Frequency</u>			
9. I write in a journal often.	3.00	(1.20)	0
11. I use my writing ability every day.	3.27	(1.10)	0
	<hr/>		
Mean	3.14	(.19)	0
<u>Writing in Other Courses and Career</u>			
8. Learning to write will help me in my other courses.	4.40	(1.06)	0
10. Writing should be a requirement in other academic courses.	3.47	(1.36)	0
19. Learning to write will help me in my career.	4.53	(.64)	0
	<hr/>		
Mean	4.13	(.58)	0

Table 1 (Continued)

Statement Mean Scores on Survey A  
(Standard Deviations are within Parentheses)

<u>Statement</u>	Mean Score	DK
<u>Writing as Easy/Grades</u>		
2. Writing essays is easy.	2.43 (.94)	1
13. Choosing topics to write about is generally easy for me.	2.87 (1.25)	0
17. I get good grades in English.	2.77 (.93)	2
Mean	2.69 (.23)	3
<u>Attendance</u>		
6. I rarely miss more than three classes during one semester.	1.91 (.83)	4
18. I never miss more than 3 classes during a semester.	3.60 (1.43)	5
Mean	2.76 (1.2)	9
<u>Peer Collaboration</u>		
16. I would recommend peer collaborative learning to my friends.	4.00 (.94)	5
20. Peer collaboration could help other students to improve their writing.	4.25 (1.16)	7
Mean	4.13 (.18)	12
Composite Mean	3.29 (.66)	

### Results from Writing Sample A

#### Prompt

During the first week of class, students were asked to write a narrative essay. The prompt, modeled after criteria set by the Maryland Writing Project (Project Basic Office, 1985), read as follows: "Write a well developed essay telling a story about an incident which drastically changed your attitude toward a person."

#### Scoring

The 15 essays were scored holistically by two raters, having at least five years experience in teaching composition. A modified analytic scale designed from Cooper and Odell (1977) focused on skills emphasized in the English Composition 101 course taught at the community college. The scale listed prominent features of writing emphasized in the English Composition 101 course. A rating was indicated by a 4 or 3, high, 2, medium, 1, low, and 0, indicating no observable presence of the feature. A 4.0 rating scale was modeled after the letter grades of A-F, with respective quality points. The values of high, medium, and low were used as a general means to describe a student's rating, and thus quality of writing. The subjects' total number of quality points were averaged to assess the students' quality of writing on a 4.0 scale. The analytic scale was adopted because of the attention to specific features of writing and distinctions made regarding the quality of writing. The scale listed clarity, diction, organization, and punctuation as prominent features of narrative writing (see Appendix B, p. 166). The total points

ranged from 0-4. The items, as they were listed on the rating sheet, are listed in Table 2.

### Results

Writing sample A scores are listed in Appendix B, p. 167. The average score of the subjects was 1.86 (1.13) on a 4.0 scale.

Table 2

### Holistic Scoring Scale

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1. Clarity (Are the ideas clearly stated?)
  2. Diction (Are words used appropriately?)
  3. Organization (Are the ideas arranged in a recognizable shape to guide readers, helping them to see how ideas, parts relate to the whole?)
  4. Punctuation (Is punctuation appropriately utilized in the essay?)
- 

### Observation Notes

Recurrent themes emerged from students' behavior and students' choices of essay topics (see transcripts of observation notes in Appendix C, p. 169). The researcher noted themes from the group interaction, during peer collaboration. The definition of socialization and specific themes are included under the following categories: (a) definition of socialization, with

illustrations; (b) individual and group response; (c) females' and males' roles; (d) minorities' and special students' roles; (e) nonverbal communication; and (f) problem solving. Each category includes an approximate percentage of theme representation in the observation notes. Percentages were derived from subjective demarkation of the number of sentences, which demonstrated specific themes. If totaled, percentages will exceed 100% because of the overlap in themes. That is, students' interaction was complex in that it consisted of more than one theme at one time.

### Socialization

Definition. Defined by the Encyclopedia of School Administration and Supervision (Gorton et al., 1988), socialization, called social learning, is the process by which individuals acquire self confidence, systems for classifying and describing people, social interaction skills, and a sense of belonging to a group. Socialization among students was the focus of the observation notes. Illustrations of the definition for socialization are below.

Self Confidence. By the third week of the semester, the process of socialization within the peer collaborative classroom became apparent. During the process of socialization, students appeared to be developing self confidence among a group of peers. Self confidence seemed to be coupled with camaraderie, in that students appeared to reach a level of informality which permitted dialogic interaction. Students seemed to be confident enough in themselves to relate to one another informally. Students sat in a circle; the room resembled a dining hall, where students sit at close proximity

to one another and socialize in a group. Through socialization, students seemed to be developing self confidence.

During the socialization, group members acquired the self confidence to refer to one another by first name; many used familiar, affectionate nicknames when referring to one another. For example, Stuart soon became Stu. Susan became Sue, and Annette became Net. Nicknamed students seemed to accept their peer collaborative classroom identity. There were no apparent objections to using nicknames. According to the teacher, nicknames seemed to be characteristic of the group's informal identity. The teacher said, "I believe they are indicators of how students feel about themselves and one another. Nicknames are students' ways of being social with one another to achieve a sort of identity within the group" (see Appendix D, p. 233). Nicknames appeared to be linked to self confidence, in that students felt comfortable enough to relate to one another informally. The use of familiar, affectionate nicknames seemed to be part of the process of socialization in this peer collaborative classroom.

By the fourth week, humour seemed to become part of the socialization process to form a group identity. Sometimes humour appeared to be used to temper criticism having to do with weaknesses of a student's writing. For example, while Susan read her essay, she stumbled over certain sentences. She laughed saying they were too long and she needed a breath before punctuation indicated that she could take one.

Stuart joked that Susan could read her writing to "practice underwater swimming," meaning that she had to hold her breath for long intervals while reading because of improper punctuation (see Appendix C, p. 207).

Another time, Annette joked, "That's okay; we're in delinquent spelling class" (see Appendix C, p. 208).

Another time a student joked, "Women [have] no place on a workboat" (see Appendix C, p. 217). Humour comprised approximately 30% of the sentences on the pages. Humour seemed to be a significant element of socialization within the peer collaborative classroom. The teacher suggested that humour within the peer collaborative classroom enhanced the group's cohesiveness. The teacher said, "Jokes sort of help the students bond with one another. Students are friendly with one another through joking" (see Appendix D, p. 233). Students were friendly with one another through humour, which seemed to be characteristic of the socialization process to form group identity.

Before the fifth week, the group's identity of being informal seemed to promote self reports of errors and weaknesses. Students recognized their own errors and weaknesses in the writing. For example, Annette told her peers during a reading that she knew her transitions were weak because she, herself, was having difficulty making connections between the ideas:

"I had problems with transitions, for sure." Annette reported that she was having difficulty writing. "I had a problem with writing that paper," Annette confessed (see Appendix C, p. 178). Students often asked questions, having to do with their own writing weaknesses.



"I have problems with tense, too. Mrs. B., what do you do with pronouns that don't match nouns as far as tense?" (see Appendix C, p. 185).

Students appeared to pose criticism in question form, sometimes saying, "I want to ask a question for me. . . like she used. . . what should I do?" (see Appendix C, p. 181).

Self-reporting of errors and weaknesses comprised a relatively small percentage of the sentences on the pages. Students' self-reporting was noteworthy because of its possible link to self and group identity, affecting students' writing. The teacher said that she encouraged students' reports of errors and weaknesses in writing, because she believed self-reporting could enhance identity. The teacher said, "Jokes . . . accompany self-reporting of errors; they seem to enable students to feel more comfortable with their roles as writers in a group. I encourage jokes and self-reporting of errors" (see Appendix D, p. 234). Through self-reporting, students seemed to be developing self-identity as writers, as well as group identity. Students also seemed to develop a sense of classifying and describing people.

Classifying and Describing Other People. Within the collaborative classroom, students seemed to separate into two social groups, one JTPA group and one self-paid group. A misuse of standard English seemed to be employed by students belonging to the JTPA group, while the self-paid group seemed to employ standard English. Intentional misuse of standard English by JTPA students occurred after the third week when students appeared to be comfortable in the classroom. Intentional misuse seemed to be indicated by a change in intonation and loudness of the words.

For example one JTPA student, Yvonne, wrote a compare/contrast composition about JTPA students and self-paid students, in which she addressed negative attitudes of what appeared to be opposing factions in the classroom. Apparently, Yvonne felt that she and her cohorts were being discriminated against because their tuition had been provided for by a special grant.

Yvonne prefaced her reading with the statement: "This ain't what you might be expectin'" (see Appendix C, p. 187). Nonstandard English was employed at the outset of the reading, perhaps to prepare Yvonne's peers for the difficult lesson they were about to receive.

The composition appeared to be written to say that there was an inherent problem which prevailed over the classroom at times, and Yvonne wanted to end the misunderstandings which caused it. While the essay was being read, Yvonne's peers read copies of Yvonne's paper silently along with her, as they fidgeted in their seats.

Yvonne read, "Paying students need to open their eyes instead of their mouths. . . ." No one else spoke. (see Appendix C, p. 187)

After the reading, Yvonne appeared to apologize, "I thought there needed to be somethin' read, since others know [of this problem]" (see Appendix C, p. 188). Yvonne seemed to speak with confidence, explaining to her peers in her own choice of words that there was a problem which needed to be resolved.

Yvonne's choice of words, at times, was a combination of nonstandard English and profanity (see Appendix C, p. 188). No one expressed objection to

her word choice, thus making it acceptable for the occasion. Her use of the English language seemed to indicate her security in an environment which permitted open discussion of student concerns. A debate ensued, which addressed a problem and possible solutions.

Mark, a self-paid student, seemed to apologize for the misunderstanding, "I guess I never really knew there was a difference" (see Appendix C, p. 188).

A minority student stated, "I don't know what a financially funded student is." There seemed to be some confusion. (see Appendix C, p. 188)

During the three-minute, silent reading of Yvonne's paper, students whispered to one another, evidencing opposing factions which had not been as visible to the researcher before the reading of the composition. Some students who were not governmentally funded expressed that they were offended by Yvonne's composition.

Annette: "We don't think we're better than you!"

Frank: "I didn't even know you were JTPA students."

Yvonne: "There have been several comments coming from that side of the room about us comin' here for free. And we, on this side of the room wanted to tell you that it's not easy for us to be here" (see Appendix C, p. 188).

Yvonne's writing had explained to her peers that before most JTPA students could leave home for class, they had to feed, bathe, and clothe children, taking some to a sitter, others to meet a school bus. Yvonne seemed to be telling her peers that JTPA students worked hard before coming to

college, for no pay, and that perhaps JTPA students had a right to an education -- even one paid for by a government grant.

Yvonne argued, "We have children and must get them off to school in the morning before coming to class -- because [God] knows, we don't want them to suffer what we have" (see Appendix C, p. 187).

Self-paid students seemed to be sympathetic, expressing their feelings through facial features and whispers. However, many of the students did not seem convinced that the JTPA students were any different than self-paid students.

Annette: "You think we don't work? Well my parents do not pay my tuition. I have to do house chores in order to reimburse my mom and dad for college tuition" (see Appendix C, p. 189).

Mark: "I work at a fast food chain to pay my college expenses" (see Appendix C, p. 189). Other students joined in the dialog to express that they worked to pay their expenses. The classroom was tense and uncomfortable for at least twenty minutes, but afterward a bonding seemed to occur between the groups, the JTPA students and the self-paid students. According to the teacher, "The students got to know one another on a more informal level," because of Yvonne's essay which described and classified the two groups that she observed to be existing in the class (see Appendix D, p. 234). Classifying and describing other people comprised approximately 90% of the sentences on the pages. The teacher believed that the students' ability for classifying and describing other people enhanced students' social interaction. The

teacher said, "I think [the students] may have grown from the skills that it took to 'mend those fences'" (see Appendix D, p. 234).

Social Interaction. The controversy over Yvonne's essay seemed to cause tension in the classroom, which required social interaction. The teacher often redirected the focus of discussion, when students seemed to be at a loss as to what to do.

For example, after Yvonne's reading, the teacher joked, "No one had any trouble understanding what Yvonne was trying to say, I suppose."

Annette responded, "I am upset by the paper" (see Appendix C, p. 189). Other students appeared to be uneasy. After much discussion the teacher redirected students' attention to the technical devices used in the writing.

The teacher asked, "How could Yvonne have said this better?" (see Appendix C, p. 190).

Students seemed to follow the teacher's example in abandoning any further discussion which might continue the controversy. The day's lesson seemed to include more than a study of writing. The teacher seemed to demonstrate social behavior to the students on how to exit a difficult situation. JTPA students and self-paid students joined together in regaining a shared purpose for the reading of the essay. Its content was discussed extensively which led to its mechanics, organization, and tone. The focus shifted from content to mechanics; the choice of words and disposition of the class shifted to a more formal level. The shift seemed to require social interaction among the group members.

The JTPA students and the self-paid students seemed to share a cohesiveness because they learned more about one another, specifically how each group felt about how tuition was paid. After class, Yvonne and Annette walked together -- talking and smiling. One student, Susan, proudly announced that she and her peers did not lack for topics about which to write (see Appendix C, p. 190).

Another student smiled and shook her head from side to side, saying, "You never know what's going to happen in this class" (see Appendix C, p. 190). The teacher suggested that the tension between the two groups enhanced social interaction. She said, "While we were very uncomfortable with the topic and the language used by Yvonne, the conflict had a positive outcome" (see Appendix D, p. 234). The problem between the JTPA and the self-paid students appeared to be resolved through social interaction. Social interaction comprised approximately 75%-80% of the sentences on the pages.

Sense of Belonging to a Group. Students, seated in a circle, appeared to be closer to one another in ways other than proximity. They had a common goal, and they seemed to like working together for the purpose of learning how to write. Students seemed to like to write for one another. In their writing they were willing to share personal experiences with one another, which seemed to provide a warm learning environment. One example of this sharing was the student who shared private anecdotes about being a waterman's daughter.

One reason this particular anecdote was noted was that Eastern Shore watermen and their families have a reputation for being private people who

distrust those whom they refer to as outsiders. Anyone who is not a native Eastern Shoreman is considered an outsider. Cindy's positive attitude toward her peers seemed to prompt her to trust them enough to share water adventures that were rarely shared with non-natives.

In her writing, Cindy explained the routine of the waterman.

She read, "To be a successful clammer you must first get up very early, way before sun up. You should eat a big breakfast, preferably hot. Dress very warm if it's winter time and pack a hearty lunch. Carry a large thermos of coffee and cigarettes if you smoke" (see Appendix C, p. 216 and Appendix F, p. 246). Cindy later described her waterman father, telling of the ritualistic thermos of coffee (the blacker, the better), the idling motor of the old pickup truck that sheltered the clammer who surveyed the "cam" water surrounding his clam boat.

Cindy also told that the clammer had outsmarted the keen eye of the "marine man" by placing the small clams in the bottom of the basket and the larger ones on top -- representing his catch of the day.

"The old timers," Cindy explained, "weren't used to no rules for catchin' clams." She winked and smiled at her peers. A warm laughter filled the classroom as Cindy spoke of the Eastern Shore waterman -- "a dying breed" (see Appendix C, p. 217).

Joyce exclaimed, "I loved it!"

Stuart teased, "Do you clam with your father?"

Cindy quipped, "Often!" (see Appendix C, p. 217).

The class pressed her to tell more about the life of the clammer.

Cindy concluded with, "After you pick your limit, head on in. Gossip with all the old watermen about your catch. Unload your boat and take your clams to market" (see Appendix C, p. 217 and Appendix F, p. 246). Every member of the group seemed to be actively involved in the class discussion, asking questions and even telling a few stories they had heard about watermen. In an interview with the researcher, the teacher suggested that students liked writing about topics that they could share with their peers.

According to the teacher, sharing topics seemed to be a catalyst for promoting group membership. The teacher said, "Students need to feel comfortable with the topics that they write about -- after all in the peer collaborative class, there is a rather active, participating audience. I find that students like to find topics that they want to share with their peers" (see Appendix D, p. 234). Shared topics seemed to affect the group's sense of belonging. Sense of belonging to a group comprised approximately 80% of the sentences on the pages. The students appeared genuinely interested in socializing with one another about personal experiences, which seemed to be indicative of students sharing a sense of belonging to the group.

Socialization is defined in terms of (a) self confidence, (b) classifying and describing people, (c) social interaction, and (d) a sense of belonging to a group. Through socialization, within the peer collaborative classroom, distinct themes emerged: (a) individual and group response, (b) females' and males' roles, (c) minorities' and special students' roles, (d) nonverbal communication, and (e) problem solving. These themes are discussed and illustrated in the following sections.



Individual and Group Response. Individual response refers to a reaction by one member of the group. Group response refers to a reaction by more than one member of the group. In the peer collaborative classroom each individual student was held accountable to the group of peers, the teacher, and self for reading and writing assignments. By the end of the fourth week, students seemed to be engaged in analyzing writing to prepare individual and group responses. Students were required to become familiar with their textbooks. For example, during silent readings students referred to their English handbook, dictionary, and notes in order to make corrections on their peers' papers.

Modeling of this behavior was demonstrated by the teacher. In addition, stronger students modeled behavior for weaker students. Immediate feedback was necessary to present to the author of the essay, so students could not delay in looking up rules and words in reference sources. Further, not only were students responsible for determining what was weak in a peer's paper, students were responsible for suggesting how to strengthen specific words, sentences, paragraphs, and essays. Students were responsible for responding both individually and as a group.

At the beginning of the class period, individual students promptly placed their desks in a circle to form a contingent group. Usually one student initiated the dissemination of papers, saying, "I'll go first this time; I want to see what you all think about my story" (see Appendix C, p. 200). After the teacher entered the room and took her seat in the circle, one of the students instructed his/her peers to "follow along silently" (see Appendix C, p. 200).

Students appeared to work independent of the teacher. The students took their cue and responded to their peer's request. During the reading, individual students used their pens to mark on the paper as they recognized strengths and weaknesses, critical to the group discussion after the reading. Through individual and group response, students offered one another feedback.

Joyce, during the reading of a peer's paper, wanted to know how to spell the word "field," so she immediately searched her dictionary for the correct spelling (see Appendix C, p. 192). She circled the word, and later corrected her peer, instructing the group that "i-e" words were problematic for most writers. Later, Yvonne, a take charge type, instructed Kevin and the group on how to spell the word, "accommodate."

Kevin responded somewhat defensively, with his shoulders back and his head cocked, "Oh yea?" (see Appendix C, p. 208).

Annette came to the rescue of Kevin and the group with humor, "That's okay; we're in delinquent spelling class" (see Appendix C, p. 208).

Kevin laughed and corrected his spelling, saying, "I should have looked that up" (see Appendix C, p. 208).

Tonesia seemed to sum up the group's feelings, "It's embarrassing to spell a word wrong in this class -- you have to face your friends" (see Appendix C, p. 209). She grinned. Individuals seemed to temper their comments for the benefit of the group. According to the teacher, students responded to one another's writing as individuals and as a group during the socialization

experience of peer collaboration for the purpose of enhancing the quality of writing.

At the end of the semester, the teacher had a backlog of students' essays, so she divided the class into four small groups. Since the students were familiar with the process of collaborative learning, they immediately began reading and responding to one another's paper. They did not depend on the instructor for guidance; they acted independently as they offered constructive criticism to their peers. The teacher briefly sat in on each group, acting as facilitator. Sometimes she asked questions about writing mechanics. If the students seemed unable to respond to a certain question, the teacher would tell them where to find the answer; otherwise, the students acted individually and as a group to analyze one another's writing.

Students seemed to become individual and group learners. They referred to the English handbook and dictionary -- and even reminded the teacher of what rules had been stressed during previous sessions. They made notations on peers' writing. They proffered immediate feedback in an open discussion, explaining strengths and weaknesses of the writing (see Appendix C, p. 208). The theme of individual and group response comprised approximately 75%-80% of the sentences on the pages. Students actively participated in learning to write, as individuals and as a group, even while controversial themes emerged: females' and males' roles.

Females' and Males' Roles. There were 10 females and 5 males in the class. The 2:1 ratio between females and males in the class presented differences in opinion, which seemed to be based on gender. Topics such a

baseball, teen pregnancy, contraception, changing oil in a car, and sewing a pillow seemed to result in debates between the sexes. The aforementioned topics occurred by the seventh week of the semester. For example, after Greg read his essay on baseball, there was banter among the males about the game. Most of the females remained silent until Cindy complained that she was "absolutely lost" in the discussion.

Greg's response was that he "thought everybody knew a little something about baseball" (see Appendix C, p. 195).

A visible difference of opinion seemed to result between the female students and the male students. Mark was appalled that anyone could be so uninformed about sports.

Mark asked Annette, "Where have you lived all your life? Baseball is the American sport!" (see Appendix C, p. 195). Susan protested, arguing that tennis could be considered the American sport and that one was not unAmerican just because she did not understand baseball. While the female students and the male students debated the issue, neither appeared to be offended. They seemed to enjoy rehashing an age-old issue. According to the teacher, socialization in the peer collaborative learning environment seemed to permit open debate, which may have affected the quality of students' writing and their attitudes toward writing (see Appendix D, p. 235).

Other topics which provoked gender roles to be more distinctive were the issues of teen pregnancy and contraceptives. Tonesia read her essay on preventing teen pregnancy, which suggested that both females and males should guard against it. Tonesia read, "Both sexes are responsible -- boys and

girls" (see Appendix C, p. 204). The discussion resulted in distinct lines between those who thought the responsibility of using contraceptives rested more with the female and those who thought the responsibility rested more with the male.

The female students and the male students verbally dueled. A consensus formed: Both the teenage female and the teenage male should share an equal responsibility for using contraceptives. The group was spirited and maintained a positive attitude. Students seemed to actively participate in class discussion, socialization, which may have affected the development of written communication skills.

The teacher said, "There is always going to be the battle of the sexes, so students need to gain a better understanding of where they stand on various issues" (see Appendix D, p. 235). According to the teacher, the controversial female versus male issues seemed to encourage the students to socialize with one another in the peer collaborative classroom.

Another topic which seemed to divide the genders dealt with car maintenance. Joyce read her essay on the process of changing the oil in a car.

When she read the title of her essay, Keven winked at Mark who smiled as if to say, "How can a woman write about such a process usually viewed as a man's job?" (see Appendix C, p. 218).

When Joyce completed her reading, Kevin confessed, "I'll bet she can do it better than I can!" (see Appendix C, p. 218).

Apparently, the content of the paper convinced the males that females have the ability to perform oil changes just as do males. The teacher said,

"After the essay on car maintenance, students seemed to have a better understanding of one another. You could say they respected one another's point of view" (see Appendix D, p. 235). The teacher suggested that the discussion which followed the reading seemed to unite the genders in the classroom, making them respectfully aware that gender had little or no effect on one's ability to change oil in a car.

Annette's essay on how to sew a pillow seemed to create a division between the genders. While the females were willing to learn to change oil in a car, it appeared that the males were not willing to learn to sew a pillow. Greg drummed his fingers on his desk as Annette read through terms such as basting, staystitching, seam, and gather. He rolled his eyes at Kevin, who grinned as if in approval of his peer's rudeness. Annette stumbled over many of her words. She seemed to be nervously responding to her audience.

After the reading Annette was dismayed saying, "It's not a good essay, anyway." Susan tried to comfort her saying, "I found it very informative, since it's been a long time since I've sewn" (see Appendix C, p. 214). The males had little to say, although their long audible sighs hurried the group on to the next essay. The teacher suggested that while the writing topic of sewing did not unite the genders, it appeared to aid them in better understanding their audience. The teacher said that writing for a diverse group, such as males and females, may "have a bearing on audience awareness" (see Appendix D, p. 235). Since the male members of the audience did not appear interested in the topic, there was a concession made -- students moved quickly to the next essay, and to a different topic.

The 2:1 ratio between females and males in the class presented differences of opinion, which seemed to be based on gender. The theme of females and males comprised approximately 10% of the sentences on the pages. Topics such as baseball, teen pregnancy, contraception, car maintenance, and sewing seemed to result in debates between the sexes. Open debate seemed to permit students to express their differences of opinion -- and in some cases, students agreed to disagree.

The socialization within the peer collaborative learning environment seemed to permit open debate, which may have affected the quality of students' writing and their attitudes toward writing. The teacher said, "I think debates [between the sexes] encourage students to participate in class. Debates are a way of socializing in the real world, so to speak" (see Appendix D, p. 235). The students seemed to benefit from the experience, including minorities and special students.

Minorities' and Special Students' Roles. Minorities and special students routinely registered for their course selection on the campus, which included this English composition course. The peer collaborative instructional method is dependent upon the interaction between and among students. Minorities and special students experienced an equal part in the educational exchange. Minorities, while at the outset of the semester grouped together, integrated with the other students as the semester progressed. Students seemed to become comfortable with one another; racial discrimination was not apparent in the peer collaborative classroom. The topic, such as the

previously discussed issue of teen pregnancy, aided in illustrating this observation.

For example the student, Tonesia, informed the group, in her writing, that the problem of teen pregnancy was not indigenous to any one race or socioeconomic group. Tonesia said that the problem of teen pregnancy was not limited to one race or socioeconomic group (see Appendix C, p. 204). Minority students and others agreed that the issue exceeded the bounds of the aforementioned factors and was one to be reckoned with before American society reached a crisis.

The teacher said, "Students socialize with one another in this peer collaborative class, so they get to know one another, and they do not seem to allow race to be a problem. It is a problem in America, and I don't deny its existence. But it truly does not seem to be a problem in the peer collaborative class. Students must work together to achieve a common goal." (see Appendix D, p. 236).

According to the teacher, while racial discrimination continues to survive in American society, it seemed to diminish in this classroom while minority and other students worked together to achieve a common goal -- students were working to improve their writing through socialization in a peer collaborative class.

Special students also actively participated in the peer collaborative class. During the fourth week, Stuart, a student with multiple sclerosis, wheeled his chair to class, strategically placing it where he could be visible to



all his peers. Previously, he had been placing his wheelchair behind another student, where he was not visible (see Appendix C, p. 184).

He later confided in the researcher that the class was so comfortable to him that he felt it was therapeutic. Stuart said, "I like this way of learning. I'm involved at all times -- talking to other people about writing and everything. It's like therapy!" (see Appendix D, p. 232). He was excited when he told the teacher and the researcher, that he appreciated the peer collaborative learning experience, believing he had benefitted from it extensively. The teacher said, "[Stuart] represents all the others. . . . He seems to like the group activity and has benefitted a great deal from it" (see Appendix D, p. 236). According to the teacher, Stuart's testimony about his experience, as well as his success in the course, seemed to reflect other students' attitudes toward the course and writing.

Greg, a student with a speech impediment, read his essays although he had difficulty pronouncing words having "r" sounds. At the beginning of the semester, he stumbled over many of the "r" words, but as the semester progressed, during the fifth week, his reading seemed to improve, and he seemed to relax more (see Appendix C, p. 182). His face did not appear to redden and his hands did not appear to tremble after the fifth week. He had not informed the teacher about his handicap, so it was never directly addressed.

However, the other students were aware of Greg's handicap and seemed to approach his writing with positive emphasis -- even when there were writing weaknesses to be discussed. Greg seemed to appreciate the

feedback and his writing seemed to improve. The teacher said that oftentimes, Greg would "thank his peers" for their comments (see Appendix D, p. 236).

Susan, a student with a self-reported emotional handicap (see Appendix D, p. 180), began the course saying that she could not read in front of the class. No pressure was placed upon her, but she was told to do the best she could. When it came her turn to read, she was asked to try. She did. Her face grew red from her neck up, and her fingers trembled (see Appendix C, p. 180). Each time, however, she grew less nervous.

Once, she hesitated saying, "I just don't think I can do it." (see Appendix C, p. 180) Her peers were aware of her handicap and they cheered her on before she read, and after she read they actually applauded (see Appendix C, p. 180). In her case, success seemed to breed success. In an interview with the researcher she stated that the class was the "best thing" for her (see Appendix D, pp. 227).

Dawn, another student with an emotional handicap, entered the course with a note from a psychologist saying that she should not be required to give oral presentations. The teacher and the researcher were perplexed as to what to do with her, so the teacher approached her outside of class reiterating what the researcher had advised the class concerning the peer collaborative teaching strategy.

Dawn insisted on staying in the class, preferring it to the traditionally taught course which was offered on the same days during the same time. Dawn never read her essays aloud in class, and she rarely spoke about others'.

She did, however, respond nonverbally, shaking her head in affirmation, smiling, frowning, etc. For example, during Cindy's reading of her essay on the habits of a waterman, she seemed to enjoy what was expressed. Dawn smiled during the reading as her eyes took in the words (see Appendix C, p. 218).

Afterward, Dawn looked at Cindy and smiled with approval. When another student commented on how cleverly the essay was written, Dawn looked at Cindy and nodded her head. During Annette's reading of the rough draft of her research paper, there was a lack of transition at one point. Dawn's eyebrows furrowed and she looked up at her peers, indicating that something was wrong. Others appeared to recognize her signals and responded verbally (see Appendix C, p. 214).

During an interview with the researcher, Dawn extolled the many advantages of peer collaborative learning.

When queried about whether or not she would register for another peer collaborative learning course, Dawn replied, "Absolutely, I learn more this way" (see Appendix D, p. 230). According to the teacher, Dawn's attitude toward writing was positive, and the teacher believed the socialization in peer collaboration helped Dawn to improve the quality of her writing. The teacher said, "I think socializing and camaraderie with the students actually helped Dawn to improve her writing" (see Appendix D, p. 237).

The peer collaborative classroom seemed to maximize the socialization between and among the students, including minorities and special students. The theme of minorities and special students comprised approximately 35%

of the sentences on the pages. Minorities and special students experienced an equal opportunity for exchanging ideas with their peers for the purpose of learning to write in the peer collaborative classroom. Minority and special students mixed with their peers, which reflected in both verbal and nonverbal communication.

Nonverbal Communication. Nonverbal communication appeared to be prevalent in the peer collaborative classroom. Students seemed compassionate toward one another as human beings. Students could touch one another. For example, moments before Mark read his essay Annette patted his arm, offering him encouragement. She did not communicate verbally, but her gestures seemed to provide an expression of compassion for another human being, which seemed to aid Mark, who was a red head with fair skin that revealed his blood flow when he grew nervous. Annette looked him in the eyes and smiled; he returned her gesture and began reading his essay -- seemingly with confidence (see Appendix C, p. 198).

The teacher noted that a camaraderie appeared to exist among the students, which appeared in their nonverbal communication. The teacher said, "[The students] seem to share an affection for one another and show it oftentimes without words" (see Appendix D, p. 233). Students' nonverbal communication seemed to demonstrate affection which may have bonded the group together for the purpose of learning how to write.

The student called Cindy is a prime example of how the students interacted with one another using nonverbals and touch. Cindy always angled her chair in the circle and sat on one leg. Her demeanor was

exemplary in that she smiled at her peers across from her, while her right arm almost touched her neighbor's. She usually presented constructive criticism with an audible clearing of the throat which seemed to indicate the humble position that she took (see Appendix C, p. 215). Her caricatured gestures infectiously evoked smiles and even laughter from her peers.

In an interview with Cindy, a JTPA student, she told the researcher, "I needed these guys or I never would have made it. I'm a high school dropout -- I never thought I could learn how to write. Besides I was bored sittin' in those classes where you had to just listen and take notes. I mean I take notes in this class but I talk a lot, too" (see Appendix D, p. 229).

When the researcher asked Cindy if she thought she could succeed in classes without her peers, she responded with, "Of course -- I know I can do it now. Your peers give you faith in yourself" (see Appendix D, p. 229). Cindy's confidence level seemed to be enhanced because of her experience with peer collaborative learning. Cindy thought that the quality of her writing improved because of the peer collaborative method of teaching.

At the close of the interview, she winked and touched the researcher's arm saying, "I never knew teachers were just people who taught." Cindy smiled, offering the researcher a nonverbal communication of appreciation (see Appendix D, p. 229). The theme of nonverbal communication comprised approximately 15% of the sentences on the pages. Nonverbal communication seemed to be an element of the socialization process within the peer collaborative classroom, which also yielded to problem solving.

Problem Solving. The teacher often delivered a problem solving task to the peer collaborative group. After each student reading, the teacher would ask the students to analyze the organization of the essay, naming the method of introduction, the thesis statement, some transitional words and phrases, and method of conclusion. Students were required to examine each essay, marking its components, for the purpose of evaluating strengths and weaknesses and to suggest ways to make the essay more effective. While each student presented suggestions to the group, each was responsible, individually, for solving the problem of finding ways to improve the essay.

Near the end of the semester, when the teacher divided the group into four subgroups, she asked the students to examine each other's writing. The teacher said, "I believe that subgrouping works only after students have been trained or socialized to working in a group, without constant teacher direction" (see Appendix D, p. 237).

According to the teacher, the small groups worked effectively to analyze each student's writing, itemizing its components and addressing strengths and weaknesses, which was a task of problem solving. Each student seemed to actively participate. Whether in the large group or small group, students debated over issues of strengths and weaknesses and how to improve the communication in the paper.

Based on group interaction, observation notes seemed to indicate that students learned that there is no one way to write an essay. The multiple perspectives of the peer collaborative class demonstrated the lesson. Susan, explained the lesson: "But that's not the only way [the idea] could be stated."

Susan told her peers, "I like [the essay] -- but we're here to learn better ways to write" (see Appendix C, p. 187). Usually there was a consensus formed about issues of mechanics, but almost always students were obliged to solve problems, providing solutions as to how and why an essay could be improved.

The teacher said, "[Students] are given a problem and solve it quite readily." She continued, "Students seem to like solving problems, and I think it helps them to become more effective writers" (see Appendix D, p. 237). The teacher suggested that the problem solving tasks seemed to lead to more positive attitudes toward writing and a higher quality of writing among students experiencing the peer collaborative learning course in composition.

Problem solving tasks appeared to be characteristic of peer collaborative learning. Class assignments were only one level of problem solving, which existed on various levels for students sharing a common task, coming from diverse backgrounds and abilities. For example, Yvonne presented a problem when she addressed the conflict between JTPA students and self-paid students. When she confronted the problem, her peers were visibly uncomfortable.

Students were faced with the problem of how to react to Yvonne's essay. There was much disagreement, accompanied by tense moments of debate, which was handled responsibly by all parties. Students expressed their views without shouting. An understanding seemed to result from students joining to solve the problem.

Another problem-solving task was introduced when the teacher was unable to attend class because of illness. Annette expressed discontent because she had worked hard on an assignment and wanted teacher feedback. Other students echoed Annette's sentiment. When the substitute teacher disseminated instructions to the class, the group banded together for the purpose of solving the problem of the next assignment. Students, in small groups of 3-4, read the instructions, and peers participated in discussing what strategy they would use for the next writing assignment (see Appendix C, p. 197).

Although the group was faced with the problem of a break in their routine because of the teacher's absence, they solved it by working together on a new problem. Also, without being told to do so, students read one another's essays offering constructive criticism.

Students in the peer collaborative classroom were faced with problem solving tasks on a multitude of levels. They were faced with a weekly writing assignment which introduced a variety of problems that each student had to deal with both independently and collectively. The problem of selecting a topic and tone were seriously considered by the writer, because the peer collaborative audience represented a multiple perspective which critically addressed the message of the writing. According to the teacher, audience was another form of problem faced by the students with each writing assignment, since the audience was not a undefined entity. The teacher said that "the peer collaborative audience is a live [one]" (see Appendix D, p. 235). The audience



was an entity that would react to the writing, engaging in communication with the writer concerning the strengths and weaknesses of the writing.

According to the teacher, "Students are faced with the problems of having to determine what method of introduction best suited a particular topic, diction, method of discourse, paragraph development, transitions, and method of conclusion" (see Appendix D, p. 237). Mechanics and content were major considerations for each student in the peer collaborative class.

Both mechanics and content presented problem solving tasks assigned to each student, and each student was required to solve the problems as individuals and as a group. The theme of problem solving comprised approximately 25% of the sentences on the pages. The teacher suggested that the problem-solving tasks enhanced socialization and seemed to contribute to improving the students' quality of writing and their attitudes toward writing.

Summary. Socialization is a process defined in terms of (a) self-identity, (b) classifying and describing people, (c) social interaction, and (d) a sense of belonging to a group. Socialization seemed to be key to the development of the peer collaborative group in which emergent themes became apparent. Emergent themes were (a) individual and group response, (b) females' and males' roles, (c) minorities' and special students' roles, (d) nonverbal communication, and (e) problem solving. The socialization experienced by the students in the peer collaborative classroom may have affected the quality of these community college freshman composition students' writing and their attitudes toward writing.

## Audiotaped Recordings

### Eleven Sessions

The eleven class sessions observed by the researcher were usually tape recorded in order to clarify recurrent themes which emerged. The researcher listened to and took notes from audiotaped recordings approximately two to three days after the observed session in order to gain a greater perspective of what took place inside the classroom. Audiotaped recordings were measured against observation notes and interview notes for clarification and exemplification.

### Student Awareness

Audiotaped recordings appeared to be noted by the students.

Cindy, on the first day of observation, asked, "Are you going to tape us?" She pretended to object, and when this researcher asked her if she minded, Cindy said, "No, not really" (see Appendix C, p. 171).

Others looked at the researcher rolling their eyes, feigning to be afraid. Some seemed to be somewhat ill at ease with the audiotaping at first.

When the researcher asked if anyone objected, Susan said, "Not at all -- we're just giving you a hard time" (see Appendix C, p. 172). The researcher turned on the recorder and began taping. The teacher noted that in minutes the group seemed to have forgotten that it was on. During subsequent observations, the click of the recorder seemed to receive less notice by the students. Most students seemed to take little, if any, notice of the recorder.

### Restrictions

Restrictions for audiotaping were placed on the researcher, however, by a student with an emotional handicap. On occasion, Dawn would ask the researcher not to audiotape on a certain day or during certain minutes of a class session. Complying with the request, the researcher pressed the stop button on the tape recorder and continued to write detailed notes based on the observation. The student's request was honored without question, since it was the researcher's ethical responsibility to avoid impeding the teaching-learning process, as well as to observe human rights.

### Key Informant Interviews

#### Selection

This researcher selected a student to assume the role of key informant. The selection was based on a student's ability to freely interact with peers and the teacher and the student's willingness to provide information to the researcher. Susan was selected because she seemed to be articulate and did not hesitate to ask her teacher and peers questions. She appeared to easily interact with group members, and she agreed to provide information to the researcher. The researcher was not aware of Susan's emotional handicap when she was selected, but it did not appear to cause any serious problem with her acting as a key informant. Three interviews were conducted with the informant. All three were conducted informally (see Appendix D for interviews, p. 224).

### Questions and Responses

The role of the key informant was to provide information about her peers to the researcher. During each interview, the student was asked three questions: What are your feelings about the peer collaborative class? How do you think your peers feel about the class? Would you and your peers prefer to be in a traditional lecture class?

First Interview. During the first interview, the student responded to the first question that she was apprehensive about the teaching strategy because it required the students to teach one another, actually sharing writing assignments. She said, "I'm not sure about this class -- I can't read in front of a whole group of people" (see Appendix D, p. 225). Responding to the second question, she told the researcher that her peers agreed with her. She said, "I think everyone is afraid of writing -- and reading in front of the class is worse!" (see Appendix D, p. 225).

In response to the third question, the informant told the researcher that she preferred the traditional lecture course because she was accustomed to the lecture teaching strategy. She said, "I think I like regular teaching better. I'm used to it." However, she reported that several of the other students, especially the JTPA students, preferred the peer collaborative strategy because they were "more comfortable" in the classroom (see Appendix D, p. 225).

Second Interview. During the second interview, the informant was asked the same three questions: What are your feelings about the peer collaborative class? How do you think your peers feel about the class?

Would you and your peers prefer to be in a traditional lecture class? The student responded to the first question that she was somewhat apprehensive about the teaching strategy, because she had difficulty reading aloud to her peers, but she was "surviving." She said, "I'm surviving -- but I still don't like reading in front of people" (see Appendix D, p. 226).

Responding to the second question, she told the researcher that her peers were enjoying the experience -- that they seemed to have gotten used to reading aloud to their peers. She said, "Everyone else seems to like it -- they adjusted to it quickly." Susan still continued to have reservations about the peer collaborative method of instruction, because she did not like to read aloud in front of other people (see Appendix D, p. 226).

In response to the the third question, the informant told the researcher that she preferred the collaborative teaching strategy to the traditional lecture strategy, despite her discomfort with reading aloud to her peers. She said she was "working on the problem" and with more experience she hoped to overcome it. She said, "I ended up liking to read in front of the class -- I just needed more practice at it" (see Appendix D, p. 227). She, again, reported that her peers preferred the peer collaborative strategy because of the flexibility of the class and the personal, individual attention given to each student. She said, "My friends really like the class!" (see Appendix D, p. 227).

Third Interview. During the third interview, the same three questions were asked: What are your feelings about the peer collaborative class? How do you think your peers feel about the class? Would you and your peers prefer to be in a traditional lecture class? The student responded to the first

question that she was no longer apprehensive about the teaching strategy, since she had gained so much from the experience. She reported that she "apparently needed the experience of reading aloud" to her peers, because she no longer felt the intense discomfort about doing it (see Appendix D, p. 227). Susan seemed to be more comfortable with reading aloud in front of her peers; thus she seemed more comfortable with the peer collaborative method of instruction.

Responding to the second question, she told the researcher that her peers were enjoying the experience -- that "they liked reading to their peers" (see Appendix D, p. 227). In response to the third question, the informant told the researcher that she and her peers much preferred the collaborative teaching strategy to the traditional teaching strategy, because of the flexibility of the class, the personal, individual attention given to each student, and because the students "had experienced English Composition rather than English Composition experiencing [them]" (see Appendix D, p. 228).

#### Attitude Survey B

A survey was administered to the 14 students during the fourteenth week of the course; survey B was worded exactly the same as survey A. The student responses were different in the fourteenth week than they were in the first week. Since one student withdrew from the course because of a job conflict, 14 students remained to respond to the survey.

The mean of the subjects' responses to statements addressing liking and enjoying writing was 3.66 (.40). The mean of the subjects' responses to

statements addressing writing frequency was 3.97 (.15). The mean of the subjects' responses to statements addressing writing in other courses and career was 4.23 (.41). The mean of the subjects' responses to statements addressing writing as easy and grades was 3.43 (.19). The mean of the subjects' responses to statements addressing attendance was 3.00 (.30). The mean of the subjects' responses to statements addressing peer collaboration was 4.36 (.21). The composite mean of the statement mean scores on survey B was 3.75 (.5). The statement mean scores on survey B are listed under Table 3 (pp. 118-119).

The mean score of the subjects was 3.74 (.78). The subject mean scores on survey B are listed in Appendix A.

Table 3

Statement Mean Scores on Survey B  
(Standard Deviations are within Parentheses)

<u>Statement</u>	Mean Score	DK
<u>Likes/Enjoys Writing</u>		
1. I like to write essays.	3.86 (1.10)	0
3. I enjoy developing paragraphs.	3.29 (1.07)	0
4. English courses are enjoyable.	3.79 (1.05)	0
5. I enjoy creating transitions.	2.86 (1.10)	0
7. I like my peers to read my writing assignments.	3.93 (1.14)	0
12. I enjoy talking about my writing with my teachers.	3.86 (1.10)	0
14. I enjoy talking about topics that I plan to write about.	3.64 (1.34)	0
15. I like my teachers to read my assignments.	4.07 (.997)	0
	<hr/>	
Mean	3.66 (.4)	0
<u>Writing Frequency</u>		
9. I write in a journal often.	3.86 (1.10)	0
11. I use my writing ability every day.	4.07 (1.)	0
	<hr/>	
Mean	4.0 (.15)	0
<u>Writing in Other Courses and Career</u>		
8. Learning to write will help me in my other courses.	4.36 (1.01)	0
10. Writing should be a requirement in other academic courses.	3.77 (1.42)	1
19. Learning to write will help me in my career.	4.57 (1.09)	0
	<hr/>	
Mean	4.23 (.41)	1



Table 3 (Continued)  
Statement Mean Scores on Survey B  
 (Standard Deviations are within Parentheses)

<u>Statement</u>	Mean Score	DK
<u>Writing as Easy/Grades</u>		
2. Writing essays is easy.	3.21 (1.12)	0
13. Choosing topics to write about is generally easy for me.	3.50 (1.51)	0
17. I get good grades in English.	3.57 (1.16)	0
Mean	3.43 (.19)	0
<u>Attendance</u>		
6. I rarely miss more than three classes during one semester.	2.79 (1.53)	0
18. I never miss more than 3 classes during a semester.	3.21 (1.67)	0
Mean	3.00 (.3)	0
<u>Peer Collaboration</u>		
16. I would recommend peer collaborative learning to my peers.	4.21 (1.31)	0
20. Peer collaboration could help other students to improve their writing.	4.50 (1.09)	0
Mean	4.36 (.21)	0
Composite Mean	3.75 (.5)	

### Analysis of Survey B Responses

Statements 1, 3, 4, 5,7, 12,14, and 15 addressed students' attitudes toward writing. The mean score for these statements was 3.66 (.4). There was a total of 0 DK responses.

Statements 9 and 11 addressed students' writing frequency. The mean score for these statements was 4.0 (.15). There was a total of 0 DK responses.

Statements 8, 10, and 19 addressed students' attitudes toward writing in other courses and their careers. The mean score of these statements was 4.23 (.41). There was a total of 1 DK response.

Statements 2, 13, and 17 addressed students' attitudes toward writing as easy and grades. The mean score of these statements was 3.43 (.19). There was a total of 0 DK responses.

Statements 6 and 18 addressed students' attendance. The mean score of these statements was 3.00 (.3). There was a total of 0 DK responses.

Statements 16 and 20 addressed students' attitudes toward peer collaboration. The mean score of these statements was 4.36 (.21). There was a total of 0 DK responses.

### Analysis of Surveys A and B

A comparison was used to analyze Survey A and Survey B. The results were as follows:

Statements 1, 3, 4, 5, 7, 12,14, and 15 addressed students' attitudes toward writing. The mean of statements 1, 3, 4, 5, 7,12,14, and 15 in survey A was 3.15; the mean of statements 1, 3, 4, 5, 7, 12, 14, and 15 in survey B was 3.66. The difference was .51.

Statements 9 and 11 addressed students' writing frequency. The mean of statements 9 and 11 in survey A was 3.14; the mean of statements 9 and 11 in survey B was 4.0. The difference was .83.

Statements 8, 10, and 19 addressed students' attitudes toward writing in other courses and their careers. The mean of statements 8, 10, and 19 in survey A was 4.13; the mean of statements 8, 10, and 19 in survey B was 4.23. The difference was .1.

Statements 2, 13, and 17 addressed students' attitudes toward writing as easy and grades. The mean of statements 2, 13, and 17 in survey A was 2.69; the mean of statements 2, 13, and 17 in survey B was 3.43. The difference was .74.

Statements 6 and 18 addressed students' attendance. The mean of statements 6 and 18 in survey A was 2.8; the mean of statements 6 and 18 in survey B was 3.00. The difference was .25.

Statements 16 and 20 addressed students' attitudes toward peer collaboration. The mean of statements 16 and 20 in survey A was 4.13; the mean of statements 16 and 20 in survey B was 4.36. The difference was .23.

### Results from Writing Sample B

#### Prompt

During the fourteenth week of class, the 14 students were asked to write an essay written in the narrative mode of discourse. A similar prompt to the one used at the beginning of the semester was provided by the instructor. The prompt was modeled after the Maryland Writing Project

(Project Basic Office, 1985). It read as follows: "Write a well developed essay telling a story about a childhood memory which shaped your attitude toward a person, place, or thing."

### Scoring

The essays were scored holistically by the two raters who scored the 15 essays of Writing Sample A.

### Results

The scores are listed in Appendix B, page 156. The average score of the subjects was 2.4 (.93) on a 4.0 scale.

## Chapter Summary

The purpose of this study was to examine the effects of peer collaboration on the quality of community college freshman composition students' writing, on their socialization, and on their attitudes toward writing. An analysis of the data was conducted to forge an hypothesis.

Survey A revealed a 3.25 mean score for the peer collaborative subjects; survey B revealed a 3.74 mean score, a difference of .49. Writing sample A revealed a 1.86 average score for the peer collaborative subjects; writing sample B revealed a 2.35 average score, a difference of .49.

Observations of the socialization in the peer collaborative classroom revealed emergent themes: (a) individual and group response; (b) females' and males' roles; (c) minorities' and special students' roles; (d) nonverbal communication; and (e) problem solving.

Chapter IV presented the analysis of the data. Chapter V will present summary, conclusions, implications, recommendations, and limitations found from the investigation of the effects of peer collaboration on the quality of community college freshman composition students' writing, on their socialization, and on their attitudes toward writing.

## CHAPTER V

### Summary, Conclusions, Implications, Recommendations, and Limitations

The purpose of this chapter is to present a summary of the problem, conclusions and implications, recommendations, and limitations that were found from the investigation of the effects of peer collaboration on the quality of community college freshman composition students' writing, on their socialization, and on their attitudes toward writing. Three questions were asked in this study:

1. What are the effects of peer collaboration on the quality of community college freshmen's writing?
2. What are the effects of peer collaboration on the socialization of community college freshman composition students?
3. What are the effects of peer collaboration on community college freshmen's attitudes toward writing?

Peer collaboration was investigated for its effectiveness as a method of instruction in the composition classroom.

This chapter will report (a) a summary of the problem, (b) conclusions and implications, (c) recommendations, and (d) limitations.

#### Summary of the Problem

Composition instruction is in need of reform and currently is being modified (Brodkey, 1987; Bruffee, 1986; Daiute, 1985; Hillocks, 1986; Slavin, 1985a). According to researchers, composition instruction is being modified in

an effort to teach students to write more effectively. One means to modify composition instruction may be to include peer collaboration as a method of teaching. Although peer collaborative learning has been used often as a method of teaching revision to undergraduates, still little is known about the interaction among group members. A better understanding of what transpires between and among peers joined for the purpose of learning how to write could derive from data provided by qualitative research on peer collaborative learning.

An analysis of research data could be conducted to form an hypothesis to suggest that peer collaborative learning in English composition, under certain conditions, exerts a positive influence on freshmen students learning to write at the community college level.

Peer collaborative learning is a method of instruction, structured so that students interact, or socialize, with one another to practice behavior that is modeled by peers and teacher. Peers and teacher mutually interact with one another. What occurs during the interaction and how it affects the quality of students' writing, students' socialization, and students' attitudes toward writing requires investigation. This was the focus of the study. If composition instruction is in need of reform, peer collaborative learning could be one means to address the problem of teaching students how to write more effectively.

### Conclusions and Implications

Given the design and small population of this study, observations suggest that peer collaboration, within the conditions of this investigation,

has the potential to improve the quality of students' writing. In addition, the implications of this study suggest that students' socialization and attitudes toward writing can improve within the peer collaborative classroom. Specific implications are discussed in the paragraphs that follow, addressing (a) Writing Attitude Surveys A and B; (b) observation notes; (c) Writing Samples A and B; (d) audiotaped notes; and (e) key informant interviews. The three research questions are listed below:

1. What are the effects of peer collaboration on the quality of community college freshmen's writing?
2. What are the effects of peer collaboration on the socialization of community college freshman composition students?
3. What are the effects of peer collaboration on community college freshmen's attitudes toward writing?

#### Sample Writings A and B

Sample Writings A and B addressed the first question: What are the effects of peer collaboration on the quality of community college freshmen's writing? Writing Sample A was compared with Writing Sample B. Writing Sample A revealed a 1.86 (1.13) average score for students before they experienced the peer collaborative learning method. Writing Sample B revealed a 2.35 (.93) average score for students after they experienced the peer collaborative learning method. There was a difference of .49. The holistic scoring scale may not be as discriminating as other instruments. The difference appears to be positive.



Although holistic scoring was the preferred method of measurement, holistic scoring has major shortcomings. Holistic scoring was the preferred method of measurement over a machine-scorable objective test or frequency count of word or sentence elements, because a human respondent is a natural link to writing. Holistic scoring is widely used among writing researchers (Cooper & Odell, 1977) because raters are human beings reacting to other human beings' writing. Moreover, holistic scores are based on actual student writing samples.

However, holistic scoring is not without its shortcomings. One major shortcoming is that holistic scores are characteristically general, rather than specific. Thus fine points regarding specific strengths and weaknesses are not necessarily registered in the holistic scores. Holistic scores may present a limited view of students' actual writing strengths and weaknesses. Holistic scores may present a limited view of the differences between students' scores.

### Observations

Observation notes addressed the second question: What are the effects of peer collaboration on the socialization of community college freshman composition students? Socialization is defined in terms of (a) self confidence, (b) classifying and describing people, (c) social interaction, and (d) a sense of belonging to a group. The peer collaborative method of instruction seemed to enhance socialization.

Self Confidence. Students appeared to develop a self confidence among a group of peers. Students appeared to gain a self confidence within the group through camaraderie. Camaraderie became apparent as peers sat at close proximity to one another in the circle, designed for socialization. During socialization, peers quickly referred to one another by first name, and some used nicknames (see Appendix C, p. 184). Self confidence and camaraderie seemed to grow out of the socialization. Students seemed to become familiar with one another, which seemed to enhance self confidence. Students became familiar with one another and sometimes used humour to offer both criticism and support. They gently joked about errors, and they rescued one another with humour, when criticism appeared to cause some students to become defensive. Students seemed to become familiar with themselves and with one another through the use of humour (see Appendix C, p. 193). Humour seemed to yield to a self confidence (Peck, 1978) in a group of peers. Self confidence seemed to yield to self-reporting of writing errors and weaknesses.

Students' self-reporting of writing errors and weaknesses was noteworthy. Students often reported their own errors and weaknesses while examining a peer's essay. Students asked questions about their peer's essay, in an effort to prevent making the same errors in their own writing (see Appendix C, p. 185). Through socialization, students seemed to develop a self confidence, which reflected in their camaraderie, use of humour, and self-reported writing weaknesses. While developing a self confidence,

students also appeared to be developing a sense of classifying and describing people.

Classifying and Describing People. Students' sense of classifying and describing people became apparent in the peer collaborative classroom. While in the peer collaborative classroom, the students seemed to separate into two groups. Some of the students described their differences as JTPA students and self-paid students. Differences resulted in classifying one another, as one student described the *us* and *them* factions.

While factions formed, they quickly seemed to dissipate. When one student described a separation, her peers appeared to unite, in an effort to regroup without the separation (see Appendix C, p. 191). The united students seemed to want to classify and describe themselves as one group. Students were individuals, who seemed to want to be one group in a peer collaborative class that emphasized social interaction.

Social Interaction. The peer collaborative learning method seemed to emphasize social interaction among the students and the teacher. Students and the teacher socially interacted to highlight the quality of the writing, also pointing out weaknesses of the writing. When problems arose, students and the teacher socially interacted to solve the problems.

The division between JTPA students and the self-paid students was one problem wherein a peer seemed to need comforting. Students and the teacher socially interacted in order to solve the problem. Through social

interaction, problems were addressed about the quality of writing and about the members of the group.

Another problem became evident when one student's spelling was corrected by a peer. Another student comforted the student by joking, saying that they were members of a delinquent spelling class (see Appendix C, p. 208). Students seemed to become socially responsible in the class. Social interaction seemed to be key in the peer collaborative composition class, which yielded to a sense of belonging to a group.

Sense of Belonging to a Group. There seemed to be a sense of belonging to a group among the members in the peer collaborative classroom. In the class, students sat in a circle and formed one group. The group had a common goal of learning more about the quality of writing. Group members seemed to like socializing with one another to share topics and knowledge about writing. Students shared personal experiences and beliefs with their writing.

Sharing experiences and beliefs seemed to be a catalyst for promoting group membership. The group actively socialized in a dialogic exchange to express ideas about writing topics and method (see Appendix C, p. 208). A sense of belonging to a group seemed to be maximized during the socialization in the peer collaborative class.

Socialization is defined in terms of (a) self confidence, (b) classifying and describing people, (c) social interaction, and (d) a sense of belonging

to a group. Socialization seemed to be enhanced in the peer collaborative classroom. Through socialization, distinct themes seemed to emerge to become characteristic of the peer collaborative class: (a) individual and group response, (b) females' and males' roles, (c) minorities' and special students' roles, (d) nonverbal communication, and (e) problem solving.

Individual and Group Response. Individual and group response seemed to promote self confidence as students engaged in socialization. Individual students were responsible for writing their own essays and analyzing their peers' essays, hence individual response. The group of students were responsible for determining elements of weak writing and suggesting elements for strong writing, hence group response (see Appendix C, p. 208). Individual students and the group of students focused on specific words, sentences, paragraphs, and essays.

Individual and group response seemed to be key in the peer collaborative learning method. Students did individual assignments and group assignments, writing and analyzing essays. Roles of individual students within the group were sometimes determined by gender.

Females' and Males' Roles. Females and males seemed to assume gender roles in the peer collaborative class. The 2:1 ratio between females and males in the class presented differences in opinion, which seemed to be based on gender. Topics such as baseball, teen pregnancy, contraception, car maintenance, and sewing seemed to result in debates between the sexes. In some cases, students agreed to disagree when there did not appear to be a *right* answer during the debate (see Appendix C, p. 216). For example, when male

students seemed to lack interest in the essay on sewing, both male students and female students quickly moved on to the next essay, not belaboring the issue.

Open debate between females and males seemed to permit students to express their differences of opinion in the peer collaborative class. Females and males seemed to openly express gender-related opinions during debates. Such debates could be beneficial to students in the real world, composed of females and males, and even minority and special students.

Minorities' and Special Students' Roles. In the peer collaborative class, minority and special students joined other students to become one group. The peer collaborative method of learning seemed to yield to a camaraderie among students. Students tended to unite with their peers, ignoring prejudice based on racism and physical and emotional handicaps.

The peer collaborative class maximized the interaction between and among students so that minorities and special students experienced an equal part in the educational exchange. Minorities, while at the outset of the semester grouped together, integrated with the other students as the semester progressed (see Appendix C, p. 177). Students seemed to become comfortable with one another, despite racial and other differences.

Special students also actively participated in the peer collaborative classroom (see Appendix C, p. 192). Physical handicaps, speech

impediments, and emotional problems seemed to blur because of the camaraderie of the students, which was observable -- even in nonverbal communication.

Nonverbal Communication. Nonverbal communication seemed to be prevalent in the peer collaborative classroom. Students used various methods of communication, which included nonverbals and touch to express their thoughts to one another. Students seemed to wink at one another and touch one another as a means to show support for their peers' efforts toward quality writing (see Appendix C, p. 214). The group bonded together for the purpose of learning to write and they seemed to show it through nonverbal communication.

The peer collaborative learning method seemed to yield to time spent on social interaction, thus human compassion was expressed while students learned more about quality writing. Nonverbal communication seemed to be an element of socialization within the peer collaborative classroom, which also yielded to problem solving.

Problem Solving. The peer collaborative method of instruction seemed to encourage problem solving. Students were responsible for analyzing the organization of an essay, naming the method of introduction, the thesis statement, some transitional words and phrases, and method of conclusion (see Appendix C, p. 221). Students were required to examine each essay, marking its components, for the purpose of evaluating strengths and weaknesses and to suggest ways to enhance the quality of the essay. All students were responsible for solving the problem of improving an essay, and

they seemed to actively participate in the process of peer collaborative learning.

Further, students were faced with the problem of learning how to deal with one another as human beings in the face of adversity. They solved such problems responsibly by openly discussing issues. At times a consensus could be reached; other times, students agreed to disagree. In the peer collaborative classroom, students socialized to solve problems, while they improved the quality of their writing, and they seemed to like it. The peer collaborative method of instruction seemed to encourage problem solving, a component of socialization.

Socialization appeared to be key to the success of the peer collaborative method of instruction. Students freely interacted with one another and the teacher in an effort to improve the quality of their writing (see Appendix C, p. 195). Moreover, students seemed to enjoy socializing with one another, and they seemed to enjoy the writing assignments. The social interaction was audiotape recorded, addressing the question: What are the effects of peer collaboration on the socialization of community college freshman composition students?

### Writing Attitude Surveys A and B

Writing Attitude Surveys A and B addressed the third question: What are the effects of peer collaboration on community college freshmen's attitudes toward writing? Writing attitude survey A was compared with writing attitude survey B. Because of the small population,



the differences were not tested statistically. Interpretations of the results are as follows:

Statements 1, 3, 4, 5, 7, 12, 14, and 15 addressed students' attitudes toward writing (see Appendix A, pp. 159-160). Students' responses, when Survey A was compared with Survey B, suggest a positive difference. Only 4 out of 15 students responded to these questions in Survey A, which may reflect that many students did not know enough about their attitudes toward writing to respond to this cluster of statements before the peer collaborative learning experience. Also, the students may have been reacting to the format of the survey. Eleven more students responded to Survey B than to Survey A. This may reflect that students' attitudes toward writing improved after the peer collaborative learning experience. After the students experienced peer collaborative learning, their attitudes toward writing seemed to improve.

Statements 9 and 11 addressed students' writing frequency (see Appendix A, pp. 159-160). Students' responses, when Survey A was compared with Survey B, suggest a positive difference. After the students experienced peer collaborative learning, their writing frequency seemed to improve.

Statements 8, 10, and 19 addressed students' attitudes toward writing in other courses and their careers or intended careers (see Appendix A, pp. 159-160). Students' responses, when Survey A was compared with Survey B, suggested a positive difference. One less student responded to Survey B than to Survey A, which may reflect that the student was uncertain about writing

in other courses and/or in his/her career. Also, this could be the student's reaction to the format of the survey. After the students experienced peer collaborative learning, their attitudes toward writing in other courses and their careers seemed to improve.

Statements 2, 13, and 17 addressed students' attitudes toward writing as being easy and students' attitudes toward their grades in English (see Appendix A, pp. 159-160). Students' responses, when Survey A was compared with Survey B, suggest a positive difference. Three more students responded to Survey B than to Survey A, which may reflect that students became more comfortable with the survey after the peer collaborative learning experience. After the students experienced peer collaborative learning, their attitudes toward writing as being easy and their attitudes toward grades in English seemed to improve.

Statements 6 and 18 addressed students' attitudes toward attendance. Students' responses, when Survey A was compared with survey B, suggest a positive difference (see Appendix A, pp. 159-160). Nine more students responded to Survey B than to Survey A, which may reflect that students became more comfortable with the survey after the peer collaborative learning experience. After the students experienced peer collaborative learning, their attitudes toward attendance to class seemed to improve.

Statements 16 and 20 addressed students' attitudes toward peer collaboration (see Appendix A, p. 159-160). Twelve more students responded to Survey B than to Survey A, which may reflect that students' attitudes

toward peer collaboration improved after the peer collaborative learning experience. After the students experienced peer collaborative learning, their attitudes toward peer collaboration seemed to improve.

Writing attitude Surveys A and B also were compared across the different clusters of questions. This comparison seemed to suggest that the students' attitudes toward writing improved after the peer collaborative learning experience.

### Audiotape Recordings

The eleven class sessions observed by the researcher were audiotaped, except on those few occasions when one student requested that the recorder be turned off. Other students were aware of the tape recorder also, though they all seemed to be less aware of it as the class proceeded with the day's lesson. The audiotape recording seemed to have minimal impact on the students' behavior.

Audiotape recordings were played approximately two to three days after the observed sessions in order for the researcher to gain a greater perspective of what took place inside the classroom. Audiotape recordings were measured against observation notes and interview notes for clarification. One example of this clarification was when the student called Cindy cleared her throat in an unusual manner. It seemed as though she was just clearing her throat, upon initial observation.

The tape recorder signaled a forceful sound, which was later observed to be Cindy's method of gaining attention from her peers. She cleared her

throat almost every time she was offering constructive criticism which focused on the weaknesses of a writing. The tone of her throat clearing, recorded on tape, seemed to indicate that she was jesting in an effort to soften the blow of the noted weaknesses in a peer's writing. Audiotape recordings captured sounds that contributed to the interpretation of the observation notes and key informant interviews.

### Key Informant Interviews

Key informant interviews addressed the question: What are the effects of peer collaboration on community college freshmen's attitudes toward writing? Three informal interviews, asking the same three questions were conducted with a key informant: What are your feelings about the peer collaborative class? How do you think your peers feel about the class? Would you and your peers prefer to be in a traditional lecture class?

The first interview indicated that the key informant was apprehensive about peer collaboration. While the informant preferred a traditional lecture class, her peers preferred peer collaboration, according to the informant. The informant had been familiar with traditional lecture and had never experienced peer collaborative learning, and she indicated concern about the unfamiliar mode of instruction. Many of her peers had experienced the traditional mode of instruction but had been unsuccessful in school. The peers seemed to have associated lack of success with the traditional lecture mode and preferred a more informal environment that the peer collaborative

classroom offered. At the beginning of the semester, the informant seemed to dislike the peer collaborative learning method, while other students seemed to like the peer collaborative learning method.

The second interview indicated that the key informant was apprehensive about peer collaboration. Her peers seemed to be enjoying the mode of instruction. Both the key informant and her peers preferred peer collaboration to the traditional mode of instruction. Students enjoyed the informal structure, flexibility of protocol, and personal attention afforded by peer collaboration. In the middle of the semester, the informant seemed to like the peer collaborative learning method; the other students also seemed to like the peer collaborative learning method.

The third interview indicated that the key informant was no longer apprehensive about the peer collaborative mode of instruction, and she and her peers enjoyed it. All the students liked the comfort in the peer collaborative classroom, as well as the personal, individual attention. At the end of the semester, the informant and the other students seemed to like the peer collaborative learning method.

The three interviews with the key informant seemed to indicate that the students enjoyed the peer collaborative learning experience in the composition class. While the key informant seemed to be apprehensive at first, she gradually preferred the peer collaborative learning method to the traditional lecture method, because of the informal structure, flexibility of protocol, and personal attention afforded by peer

collaboration. Findings from the key informant interviews were supported by triangulation.

Attitude Surveys A and B, observation notes, Writing Samples A and B, audiotape recordings, and the key informant interviews indicated that students' writing quality improved, students' socialization was enhanced, and students' attitudes toward writing improved after the peer collaborative learning experience in freshman English Composition 101. The investigation of peer collaboration resulted in recommendations.

#### Recommendations

As a result of this investigation, the following recommendations seem warranted by this study:

1. Further research is needed to study the effects of peer collaboration on community college freshman composition students, using fewer questions on the survey instrument. Many of the questions on the survey used in this study were general rather than specific to writing in English composition. For example, general questions that referred to writing frequency, writing in other courses and careers, writing as easy and grades in English, and attendance to class could have been eliminated.
2. Further research is needed to study the effects of peer collaboration on students who have been trained for the peer collaborative classroom, with a clear set of guidelines. Training students to learn to write in a peer collaborative classroom should be a priority,

according to Schultz (1989/1990). More investigation of how students could be trained to learn in a peer collaborative classroom, with a clear set of guidelines, may be beneficial.

3. Further research is needed to study the effects of peer collaboration on students, whose teacher has been trained for the peer collaborative classroom, with a clear set of guidelines. Training teachers to teach writing in a peer collaborative classroom should be a priority, according to Schultz (1989/1990). More investigation of how teachers could be trained to teach writing in a peer collaborative classroom, with a clear set of guidelines, may be beneficial.
4. Further research is needed to study the effects of peer collaboration, with a more indepth analysis of the target population of community college freshman composition students. There is a limited body of research literature devoted to the effects of peer collaboration and community college freshmen composition students. Further study is necessary to investigate peer collaboration and community college freshmen composition students.
5. The present study of the effects of peer collaboration on community college composition students could serve as a model for further study. The present study is valid because of the triangulated method of data collection and analysis. More valid

studies are needed in peer collaborative learning and composition.

There is a limited body of research literature in this area.

As the list of recommendations may suggest, there were limitations to the investigation of the effects of peer collaboration on the quality of community college freshman's writing, on their socialization, and on their attitudes toward writing.

### Limitations

This study has limitations which are listed below:

1. One community college freshman composition class was studied. A control group could be beneficial in order to note the differences between the two groups: the treatment group and the control group.
2. The class was not randomly selected because of administrative limitations. The class was assigned to this researcher by the administration.
3. The results of the study cannot be generalized to other community colleges' freshman composition classes. Because of the absence of random selection and the small population, generalizability was restricted.
4. The Hawthorne Effect may have been present. This researcher conducted a pilot study of peer collaboration and composition which seemed to yield positive results, so this researcher may have been affected by the pilot results.



5. While audiotaping did not appear to affect most students after the first few minutes of a class session, students were aware of its use. Student awareness of the audiotaping may have affected the students.

Below is a summary of the investigation of the effects of peer collaboration on the quality of community college freshman's writing, on their socialization, and on their attitudes toward writing.

#### Chapter Summary

The purpose of this study was to investigate the effects of peer collaboration on the quality of community college freshmen's writing, on their socialization, and on their attitudes toward writing. An analysis of the data was conducted to form an hypothesis which suggested that peer collaborative learning in English composition, under certain conditions, exerts a positive influence on freshman students learning to write at the community college level. The data collected in this study suggest that in a peer collaborative learning environment, community college freshmen's writing improved, their socialization was enhanced, and students liked learning to write.

Survey A revealed a 3.29 (.66) mean score for the peer collaborative subjects; Survey B revealed a 3.75 (.5) mean score, a difference of .46. The difference suggests that students' attitudes toward peer collaborative learning changed after the peer collaborative experience, and that they liked peer collaboration more after they experienced it.

Writing Sample A revealed a 1.86 (1.13) average score for the peer collaborative subjects; Writing Sample B revealed a 2.35 (.93) average score, a difference of .49. The difference suggests that students' quality of writing changed after the peer collaborative experience, and that students' writing improved after they experienced peer collaboration.

Observation notes revealed emergent themes: (a) individual and group response; (b) females' and males' roles; (c) minorities' and special students' roles; (d) nonverbal communication; and (e) problem solving.

The theme of individual and group response comprised approximately 75%-80% of the sentences in the observation notes. Students seemed to participate actively in learning to write, as individuals and as a group.

Females' and males' roles comprised approximately 10% of the sentences in the observation notes. Students seemed to participate in open debate over gender issues.

The theme of minorities' and special students' roles comprised approximately 35% of the sentences in the observation notes. Students seemed to experience an equal opportunity to exchange ideas in the peer collaborative class. Minority and special students seemed to interact with their peers.

The theme of nonverbal communication comprised approximately 15% of the sentences in the observation notes. Nonverbal communication seemed to be an element of socialization within the peer collaborative class.

The theme of problem solving comprised approximately 25% of the sentences in the observation notes. Problem solving seemed to enhance

socialization and seemed to improve the quality of students' writing within the peer collaborative class.

Observation notes and key informant interviews supported the results of the surveys and writing samples. The data suggest the hypothesis that peer collaboration, under certain conditions, can have positive effects on the quality of community college freshmen's writing, on their socialization, and on their attitudes toward writing. Peer collaboration can be an effective method of instruction in the composition classroom.

As stated in the recommendations, this study could serve as a model for other studies on the effects of peer collaboration in community college freshmen composition students. The limited body of research in this area indicates a need for further study.

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APPENDIX A

January 24, 1989

Freshman Composition Students  
Chesapeake College  
Box 8  
Wye Mills, MD 21679

Dear Student:

This semester I am planning to conduct a study of the peer collaborative method of instruction in English Composition. My purpose is to describe the effects of peer collaboration on students' attitudes toward writing and on the quality of students' writing.

I plan to observe ten class sessions and interview at least one student. Also, I plan to assess two writing samples, written by you at the beginning of the semester and at the end of the semester. Further, I plan to have you respond to two surveys, one at the beginning and one at the end of the semester.

I am asking for your participation in the study. Please indicate whether or not you intend to participate in the study by checking the appropriate spaces below and signing your name.

Sincerely,

Shirley Thompson

I will participate in the study.

I will not participate in the study.

Student's Signature \_\_\_\_\_



## STUDENT SURVEY A &amp; B

Please identify yourself by filling in the blanks below:

Married\_\_\_\_\_ Single\_\_\_\_\_ Separated\_\_\_\_\_

Household Income:

Age	_____	0-10,000	_____
Sex	_____	10,000-20,000	_____
Race	_____	30,000-50,000	_____
Major	_____	50,000-More	_____
Credits this semester	_____	Work hours per week	_____
GPA	_____	Total Number Credits	_____
		Expected Grade in	
		Composition	_____

**Directions:** Circle the most appropriate response to the statements listed below. The numbers correspond to the following responses:

1-Strongly Disagree 2-Disagree 3-Neither (neither agree nor disagree)  
4-Agree 5-Strongly Agree DK-Don't Know

- |  |              |
|--|--------------|
| 1. I like to write essays.                                     | 1 2 3 4 5 DK |
| 2. Writing essays is easy.                                     | 1 2 3 4 5 DK |
| 3. I enjoy developing paragraphs.                              | 1 2 3 4 5 DK |
| 4. English courses are enjoyable.                              | 1 2 3 4 5 DK |
| 5. I enjoy creating transitions.                               | 1 2 3 4 5 DK |
| 6. I rarely miss more than three classes during one semester.  | 1 2 3 4 5 DK |
| 7. I like my peers to read my writing assignments.             | 1 2 3 4 5 DK |
| 8. Learning to write will help me in my other courses.         | 1 2 3 4 5 DK |
| 9. I write in a journal often.                                 | 1 2 3 4 5 DK |
| 10. Writing should be a requirement in other academic courses. | 1 2 3 4 5 DK |

11. I use my writing ability every day. 1 2 3 4 5 DK
12. I enjoy talking about my writing with my teachers. 1 2 3 4 5 DK
13. Choosing topics to write about is generally easy for me. 1 2 3 4 5 DK
14. I enjoy talking about topics that I plan to write about. 1 2 3 4 5 DK
15. I like my teachers to read my assignments. 1 2 3 4 5 DK
16. I would recommend peer collaborative learning to my friends. 1 2 3 4 5 DK
17. I get good grades in English. 1 2 3 4 5 DK
18. I rarely miss more than 3 classes during a semester. 1 2 3 4 5 DK
19. Learning to write will help me in my career. 1 2 3 4 5 DK
20. Peer collaboration could help other students to improve their writing. 1 2 3 4 5 DK

COMMENTS:

Subject Mean Scores on Survey A

Subject	Mean Score
1	3.4
2	3.0
3	2.6
4	3.3
5	1.9
6	3.2
7	4.2
8	2.5
9	2.5
10	2.6
11	3.2
12	2.6
13	3.8
14	3.5
15	1.4

Students' Scores on Survey AStatements

Subject	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1	3	2	4	4	3	1	3	5	3	4	4	4	2	3	4	4	3	5	5	2	
2	2	1	1	1	1	3	1	5	3	4	5	5	5	5	5	-	3	-	5	5	
3	3	3	4	3	3	-	4	5	2	2	4	3	3	4	4	-	-	-	4	-	
4	4	2	3	4	4	1	-	5	2	4	4	4	3	4	5	-	4	3	5	5	
5	3	2	-	3	-	-	3	5	2	3	4	-	2	-	3	-	-	3	5	-	
6	3	2	3	4	3	2	2	5	5	5	3	4	4	4	4	-	2	3	5	-	
7	5	5	3	3	3	3	5	4	3	5	5	5	5	5	5	5	4	1	5	5	
8	3	2	1	3	-	2	4	5	4	1	2	3	3	4	2	4	2	-	5	-	
9	3	2	3	4	-	-	3	4	2	3	3	3	2	2	4	5	3	-	4	-	
10	2	2	2	4	2	1	2	5	2	5	2	1	1	2	2	4	2	5	5	-	
11	4	3	3	3	2	1	3	2	3	4	3	2	1	4	3	5	3	5	5	5	
12	3	2	3	3	-	2	2	4	5	3	3	2	2	2	2	4	2	5	3	-	
13	4	3	3	3	4	3	4	5	4	5	3	4	4	5	5	4	3	2	4	4	
14	4	3	3	4	3	2	3	5	4	3	3	4	3	3	4	3	4	4	4	3	
15	-	-	-	1	-	-	2	2	1	1	1	1	3	2	2	2	2	1	-	4	5

Subject Mean Scores on Survey B

Subject	Mean Score
1	3.7
2	4.7
3	3.3
4	4.5
5	2.2
6	3.8
7	4.7
8	2.6
9	4.4
10	2.6
11	4.3
12	3.8
13	3.9
14	4.2

Students' Scores on Survey BStatements

Subject	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	3	3	2	2	1	4	4	5	3	2	5	4	3	4	5	5	4	4	5	5
2	5	5	5	4	4	5	5	5	3	5	5	5	5	5	5	5	5	2	5	5
3	3	3	3	4	2	3	1	3	2	2	4	4	5	5	4	3	2	3	5	4
4	4	4	2	5	3	3	5	5	5	5	5	5	5	5	4	5	4	5	5	5
5	2	2	2	3	2	3	3	3	4	1	2	2	1	1	2	2	1	2	2	4
6	3	4	3	4	4	5	5	4	5	5	4	4	1	2	3	5	3	1	5	5
7	5	5	5	5	4	1	5	5	5	4	5	4	5	5	5	5	5	5	5	5
8	2	2	2	2	1	1	3	4	2	-	3	4	2	3	4	4	3	1	5	4
9	5	4	4	5	2	3	5	5	5	5	5	4	4	4	4	5	4	5	5	5
10	4	2	3	3	3	1	4	2	5	3	3	1	2	2	3	1	3	4	2	1
11	4	4	4	3	4	4	4	5	3	5	4	5	5	5	5	5	5	1	5	5
12	5	3	4	4	3	4	3	5	4	3	3	4	4	3	3	4	4	2	5	5
13	5	2	3	5	3	1	4	5	4	4	4	4	3	3	5	5	3	5	5	5
14	4	2	4	4	4	1	4	5	4	5	5	4	4	4	5	5	4	5	5	5

APPENDIX B

## HOLISTIC SCORING

### Rating Scale

**Instructions:**

Rater, please rate the student's essay, utilizing the 4-point scale below. If the student's essay is satisfactory in the following area, give one point for each.

The student receives no point in an area for which the essay is unsatisfactory.

**Note:** No more than 2 minutes should be spent on evaluating an essay.

(Critical marking is not necessary.)

Student's Identification Number: \_\_\_\_\_

- |    |   |       |
|----|---|-------|
| 1. | Clarity (Are the ideas clearly stated?)   | _____ |
| 2. | Diction (Are words used appropriately?)   | _____ |
| 3. | Organization (Are the ideas arranged in a recognizable shape to guide readers, helping them to see how ideas, parts relate to the whole?) | _____ |
| 4. | Punctuation (Is punctuation appropriately utilized in the essay?)   | _____ |

**\*Inter-rater reliability checks were conducted on practice essays and on two sets of narrative essays written for the pilot study.**



Subjects' Holistic Scores on Sample Writing A

Subject	Score
1	2
2	1
3	1
4	2
5	2
6	4
7	1
8	3
9	3
10	1
11	4
12	1
13	1
14	1
15	1

Subjects' Holistic Scores on Writing Sample B

Subject	Score
1	2
2	2
3	2
4	3
5	2
6	4
7	2
8	3
9	3
10	1
11	4
12	2
13	2
14	1

APPENDIX C

Administration of Questionnaire A and Writing  
Sample A

January 24, 1989

Objective: Course Introduction

Students Present: 15

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Observation:

I introduced the peer collaboration study to the class. Students looked somewhat bewildered, with widened eyes. Students sat rigidly facing me, the speaker. Some took notes. They smiled and nodded their heads when I asked them if they would be willing to participate in the study. One woman (heavy, with dark hair) said, "This'll be fun -- huh?" Some of her peers nodded in agreement. One student looked scared, as she mocked a frown, then smiled. When I handed out the questionnaire, students quickly read through the questions, jotting down answers. Immediately following the administration of the questionnaire, the teacher instructed the

Students' attitudes: fear  
and perhaps negative.

Students' attitudes: fear  
and perhaps negative.

students to write a sample essay for the study. She said, "This essay is for the research project, only, and will not be graded." She wrote the instructions on the board: Write a well developed essay telling a story about an incident which drastically changed your attitude toward a person (250-500 words). The heavy student, with dark hair, asked, "And you say this essay won't be graded?" The teacher smiled, "Not this one." The students began shuffling through papers and backpacks, searching for their writing tools. One boy drummed his fingers on his desk. Another student was squinting her eyes, staring at the blank page. Within minutes, all students were writing. As the students finished their writing, Cindy asked me, the researcher, "Are you going to tape us?" She pretended to object. She was asked, "Do you mind?" She said, "No, not really." Others looked at her, rolling their eyes and pretending to be afraid.

Students' attitudes: fear of writing seemed to be linked to grading.

Students were asked if they objected to being taped. While some appeared ill at ease, Susan acted as spokesperson, saying, "Not at all, we're just giving you a hard time." After the writing assignment, students sat spaced apart from one another, rigidly watching the teacher. The teacher gave her office hours, "I'll be in my office Monday through Thursday, 9:00-9:30, and Monday/Wednesday from 1:30-3:00. If I'm not in my office, I'll be in H-108 having coffee." She laughed. Students laughed. Students' eyes looked straight forward, their eyes shifting sideways to look at other students, from time to time. Two females talked with one another, one saying, "I don't know about this." The other responded with, "Me neither." The teacher explained the course further, emphasizing expository writing. She explained, "In other words, you will not be writing poems." Students looked at the teacher and then

Lecture style teaching:

Students look straight ahead -- at teacher, with limited student socialization.

Prior to peer collaborative experience, students have a fear of writing.

looked down at the syllabus. They did not look at one another. All students remained quiet. The teacher talked. Students took notes. No questions were asked. The teacher explained the course, looking at the faces. One (black) student smiled at the teacher, when she mentioned journal writing. Then the teacher said, "No tests, no exams in this course." Most students smiled at the teacher. One (black) student said, "Yay!" under her breath. Teacher continued talking, "Attendance is vital to a peer collaborative class. . . ." The teacher then went on to explain the research paper. One student asked, "Will the research paper have to be typed??" Another student asked, "Will it require footnotes?" Teacher answers. One student nibbled on her pen as the teacher talked. Another jiggled his leg. All students were attentive to what the teacher was saying. They looked directly at her. The teacher shifted the topic back

Lecture style teaching:  
limited socialization.

Lecture style: Students  
appear nervous.

to peer collaborative writing: "In this class we will learn to write as a team. You will write your themes at home and bring them in so your peers can read them. Then, you may make revisions to your themes, after input from your peers and me, and turn them in for a better grade." Some of the students nodded in approval; one smiled at the other. The teacher explained the peer collaborative procedure: "I will not be lecturing to you as I am now. I'll sit with you in a circle and we will talk about writing together." One student grinned at the student seated across the aisle. Then the teacher assigned the first writing assignment in the examples mode of discourse: Write a well developed essay giving 3 examples of television shows that distort reality. "I'll accept anything other than cartoons." Students laughed. One joked, "Not cartoons. . . ." Teacher laughed, "Let's not talk about cartoons." The teacher wrote the prompt on the board:

Peer collaboration defined:  
Team learning.

Students' attitudes toward  
peer collaboration positive.

Students' attitudes toward  
peer collaborative learning  
seem positive.



Many television shows distort reality. Give 3 examples using concrete details -- names of characters, scenes, etc. (At least one page) The teacher explained that the students would have enough time to begin the essay, but they would have to complete it at home. "Will we be graded on this essay?" one student asked. Teacher: "Yes, this one will be graded. And since it is your first, we'll keep it short -- one page. One student complained, "A whole page?" and under her breath mumbled, "I can't write a whole page." Students began writing, but one student loudly wadded up her paper and threw it in the trashcan. Another student shuffled about looking for his paper in a backpack (book bag). There were many sighs; papers were shuffled and wadded; and one student tapped his pen on the desk. Students were preparing to write.

Students' attitudes toward writing seem negative prior to peer collaborative learning.

February 9, 1989

Objective: Narrative/Descriptive

Students Present: 15

---

Observation:

Students gathered in a circle and sat with one another. Laughter could be heard as the teacher walked into the classroom.

The teacher returned thesis statements to students. All were attentive, looking at the teacher as she spoke. Some students sat with arms around chairs, their legs stretched out. Some students nodded their heads and smiled at the teacher, at one another. Teacher smiled back. She asked who would read first. Frank complained, "I don't want to read my paper out loud." "Me either," cried another student. Still another asked, "We don't have to if we don't want to, do we?" The teacher smiled, "Well I'd really like everyone to at least try."

Annette asked, "Will you grade our papers today?" Teacher said, "Yes, you

Socialization seemed to enhance in peer collaborative learning arrangement -- a circle.

Students' attitudes toward reading their writing seemed negative before the peer collaborative experience.

Students' attitudes seem

will receive a grade on your paper today, after you read it to the class." Annette (blonde student) said, "Then I'll read first." She nervously read, stumbling over some of the words. Dawn frowned and furrowed her brows, indicating discord – something was wrong with the writing. Other students recognized her signals. Dawn exchanged frowns with some of her peers. The teacher asked Kevin to close the door, calling him by name. Another student said, "Thanks, Kevin." Three black students sat together in the circle. Students freely discussed the main point of Annette's essay. One male student said, "I liked all the details. But on the second page, maybe you could change the word 'walks' to 'walked' and it would make more sense." Other students chimed in with their comments. There was active dialog going on back and forth in the circle. Students looked at one another as they spoke. The students began talking about

positive toward receiving immediate feedback, a component of peer collaborative learning. Nonverbal communication.

Socialization among peers seemed positive. Systems for classifying people/ racial segregation at outset of peer collaborative experience (minorities).

Socialization among peers seemed positive.

the topic, when the teacher redirected the focus to the thesis statement: "Where is the thesis statement?" There was a moment's pause. . . . "I think it is in the first paragraph." The teacher asked the student to read it. She did. Another student said, "Yea, that's what I thought, too." The teacher said, "Good detective work! Now, how clear is the thesis statement?" There was discussion about the clarity. One student said apologetically, "I didn't think it was that clear. It was kinda vague." Annette confessed, "I had a problem with writing that paper." The teacher asked, "In that middle part where you stumbled?" Annette: "Yes, I think so. . . . I don't know exactly what the problem was. . . . I had problems with transitions, for sure." The teacher said, "Okay, let's everyone help Annette find the problem, so she can correct it." A male student said, "I really liked your paper. But maybe on page 2 after . . . you could stop this

Socialization among students devoted to quality of writing.

Self-identity; group identity: self-reported errors.

Socialization among students devoted to quality of writing.

sentence and begin a new one here." He looked at her as he spoke. Kevin interjected, "Also on page 2, there is no paragraph break." "oh yea," said Annette, "but where should I break?" Yvonne advised, "Well maybe you could break right after the word. . . ." Mark also made a suggestion, as did another student. The circle was active with dialog. The teacher reminded the students, "Make sure you write your comments on your copy of Annette's essay, so you can give them to Annette." Yvonne said, "Some of the lines seem jumbled with too many words." As she spoke, she looked at the teacher – not Annette. Cindy commented that she thought "the language in the lines seemed more conversational, 'like went to leave,' instead of 'leaving.'" The teacher clarified, "Yes, there is what is referred to as colloquial language, or language that is usually spoken rather than written." Susan asked, "Could this

Individual and group response/independent, critical thinking.

Individual and group response/independent, critical thinking.

Classifying people:

Student limits eye contact to teacher (nonverbal socialization).

Socialization among students and teacher devoted to quality of writing.

have been made clearer if. . . ." Annette took notes on her peers' comments. She responded with a smile and a nod to Susan. Then the teacher asked, "Was spelling a problem?" Some of the students laughed. . . . Cindy confessed, "We all have that problem!" The teacher agreed. Specific spellings were discussed. Students referred to their dictionaries. Soon the teacher asked for the next paper to be read. . . . "Susan's." Susan hesitated, "I just don't think I can do it." Susan rendered, "I have a lot of anxiety about having to read out loud — shortness of breath, and all, but I'll try." Susan's face and neck were red. Her hands trembled and so did her voice. After she read the last word, a few of her peers applauded. One said, "Good!" Another said, "I can relate to that." Susan patted her chest in relief. During the silent reading, Kevin whispered to a peer, "I am impressed." The teacher asked, "Do you have any comments for

Socialization: self-identity; group identity.

Classifying people/  
handicapped (emotionally)  
student was supported  
by the group.

Socialization . Self-identity; group identity;  
sense of belonging.

Susan?" Yvonne answered, "It's great! I can relate to what she says." Others praised the writing. Frank said, "I have a question about the first sentence. Yvonne explained, "The point she is trying to make is . . . I also have a problem with apostrophes. . . ." The teacher referred students to English handbook. Yvonne said, "Good, I want to know for myself. I have a problem." The teacher consoled her, "It is not just your problem. We all have a problem with apostrophes sometimes." Kevin laughed, "You should have looked at your Little Brown Handbook for that license plate." Students laughed (inside joke). One student patted Yvonne's shoulder. There was more discussion about writing. Cindy raised the point about repetition, "There are too many *goods*. Mark said, "I liked them." Then Mark said, "I have a question for me. . . like she used. . . what should I do about repetition?" The teacher responded.

Socialization: group support.

Peer collaboration:  
Team learning.

Nonverbal communication:  
Touch: Sense of  
belonging.

Self-identity; group  
identity.

Students took notes as teacher and students talked. One student (handicapped) sat outside the circle. He contributed to the dialog -- though reluctantly at first. He did not speak as soon or as often as some of the others. The topic involved age--teenagers--the generation gap. There was much laughter. Cindy looked at Susan and said, "That's how mommies feel!" Susan said, "I understand what you mean. Next paper: Greg's. The teacher asked Greg to read. He agreed to do it, but rolled his eyes at Frank. Greg stumbled over the "r" words. Susan comforted him, "I enjoyed that essay; it was an adventure!" Yvonne yelled, "But when you see it's going to rain, get the hell out of the water. . . ." She was addressing the content. Yvonne rolled her eyes and said, "S \_ \_ \_." The teacher nervously laughed at the profanity. Susan talked seriously about ideas expressed, redirecting the flow/tone of

Classifying people/  
handicapped student  
(with MS) sat outside the group at outset of peer collaborative experience.

Socialization: Classifying and describing people (age).

Socialization: Casual idiolect.



the discussion. The topic of the essay concerned thunderstorms and how many could go on at one time. The teacher redirected the focus of the discussion to paragraph development. One student looked to her English handbook. Yvonne commented that she liked Greg's paper. He responded with a gentle, "Thank you." The students were dismissed after the teacher told them that they had run out of time. She told the students that they would continue their discussion of writing when they returned.

Individual and group response. Independent, critical thinking.

Students' attitudes  
twoard course: They had to be reminded to leave; sense of belonging.

March 16, 1989

Objective: Cause/Effect

Students Present: 14

---

Observation:

The circle had changed. Students were closer and more freely interacted with one another. Stu, (as Stuart was affectionately called by his peers), in his wheelchair, had moved to become part of the circle. In addition, men and women were interwoven, rather than clustered together by gender. Further, black students were interwoven with other students. Black students were no longer clustered together by race. There was informal interaction among the students before the teacher arrived. For example, one black girl sat chatting and smiling with a white girl. When the teacher arrived, she sat in the circle. The students were prepared to read their papers, already circulating them to one another. One student volunteered to

Self-identity: group

identity: Handicapped student sat inside the circle with his peers.

Nicknames were affectionately employed by the student.

Racial integration of black students with white students; sense of belonging (minorities with others).

Students' attitudes were more positive toward reading their writing.

read first, without having to be called on by the teacher. During the reading of students' papers, all students actively participated, reading along and taking notes. One student said, "I have problems with tense, too. Mrs. B., what do you do with pronouns that don't match nouns as far as tense?" Another asked, "I want to ask a question for me. . . like she used. . . what should I do?" During the critical analysis, students offered criticism on content, punctuation, diction, and organization. There was criticism accompanied by laughter. There was direct eye contact between students. For example, when Stu critiqued Cindy's essay, he looked her directly in the eyes from across the circle. Annette, (affectionately called Net by her peers), chimed in with, "I like it the way Cindy has it." Others examined the point being made, looking at the copy of Cindy's paper in front of them. Joyce said she thought Stu made a "good

Peer collaboration:

Active participation.

Self-identity; group

identity: via jokes and

laughter; sense of

belonging.

Individual and group

response/independent,

critical thinking.

point." Joyce read her essay next. All students actively participated during the reading, marking the papers. All eyes faced downward. Pens rigorously stroked the paper. The essay was neatly typed but riddled with error. During the 2-3 minute session for silent reading, all students participated, diligently writing. The teacher prompted responses by asking questions. The students had been looking down, reading until her prompt. Students were asked, "What is the main point of the essay?" Students began offering criticism about the paper. For example, Annette said, "She did not explain what is meant by 'house' or 'apartment.'" Joyce responded, looking at Annette, "I meant that. . . ." Stuart said, "Well I think it would be better to say. . . ." Mark said, "Do you think that it could be written. . .?" Susan said, "But that's not the only way it could be stated. . . ." Stu and Sue, (Susan was nicknamed by her peers), could not agree on the

Individual and group response/independent, critical thinking.

Active socialization devoted to quality of writing.

discussion about phrasing. The teacher offered her view to break what seemed to be a standoff. The teacher then instructed the students to return the copies to Joyce. Susan told Joyce that she liked the paper: "I like it – but we're here to learn better ways to write." Joyce shook her head and smiled at Susan. She agreed, "Right." The next student to read her paper was Yvonne, who wrote about JTPA (Job-Training Partnership Act) Students vs. Paying Students, a paper written in the contrast mode. Yvonne pointedly volunteered to read her paper. She said, "This ain't what you might be expectin'." She read, "Paying students need to open their eyes instead of their mouths. . . . We have children and have to get them off to school in the morning before we can come to class. . . . Christ knows we don't want them [the children] to suffer what we have." No one else spoke. All students were tensely quiet after the

Positive socialization:  
social interaction skills.

Classifying and  
describing people.

Problem solving.

reading. Students shifted their eyes at one another, studying the faces of their peers. Yvonne spoke, "I thought there needed to be somethin' read, since others know about this, too. I mean Christ I thought you should know." Yvonne's diction grew vulgar, as she attempted to describe the conflict between JTPA students and the others. Mark sighed and stated, "I guess I never really knew there was a difference." A minority student said, "I don't know what a financially funded student is." There was confusion. During the silent reading, students began whispering to one another. Finally, Annette retorted, "We don't think we're better than you!" Frank argued, "I didn't even know you were JTPA students." Yvonne complained, "There have been several comments comin' from that side of the room about us comin' here for free. And we, on this side of the room wanted to tell you that it's not easy for us to be

Classifying and  
describing people.

Problem solving.

Problem solving.

here." She continued, "Damn it, we can't help it the way we are." Annette was visibly perturbed, fidgeting in her seat, flashing her eyes, shaking her head: "You think we don't work? Well my parents do not pay my tuition. I have to do house chores in order to reimburse my mom and dad for college tuition." Mark was less visibly irritated, but wanted to make a point: "I work at a fast food chain to pay my college expenses." Factions seemed to emerge. There was continued controversy regarding Yvonne's essay. Finally, the teacher joked, "No one had any trouble understanding what Yvonne was trying to say, I suppose." Mark reiterated, "I guess I never really knew there was a difference." The teacher said, "We don't want to stereotype groups. In writing, the writer must be careful to take an objective tone -- otherwise the writer, you, will antagonize the other side, your audience." Annette remarked, "I was

Self-identity:

Casual, informal idiolect.

Self-identity.

Problem solving.

Jokes to soften the tone of the problem presented.

upset by the paper. . . ." The teacher asked, "How could Yvonne have said this better? Let's look at the diction/tone." Content was abandoned somewhat to examine the paper's mechanics, organization. Students offered constructive criticism. When class ended, Yvonne and Annette walked out together; they were talking and smiling. Susan said, "Well we don't lack for topics in this class." Another student smiled and shook her head from side to side, saying, "You never know what's going to happen in this class." (After class, Stuart and the teacher talked. Stuart was excited about the class. He smiled and said, "This class is sort of therapeutic for me. It's like being a member of a team. We can all talk whenever we want to and about almost anything we want to. I've never had a class like this before. And I can actually say that I am learning more about writing.")

Problem solving. Social interaction skills. Self-identity; group identity.

Problem solving. Social interaction skills, Sense of belonging.



March 23, 1989

Objective: Compare/Contrast

Students Present: 13

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Observation:

Stuart's paper was passed around while students chatted quietly. I arrived a few minutes before class to watch students interact. Surprisingly, Yvonne and Annette were talking with one another -- although they were across the room from one another. Their loud conversation and laughter invited others to join in as students entered the classroom. This interaction was different from the interaction observed during and after the reading of Yvonne's essay about JTPA students. Yvonne was teasing Annette for "being so skinny; she could eat anything she wanted and not get fat." When the teacher arrived, Stuart read his paper about green beans. After the silent reading, students expressed delight in the essay, despite the

Social interaction skills.

Social interaction skills.

Sense of belonging.

topic on green beans. One student said, "The description is good -- reminds me of John Denver's songs about country life." Joyce said, "I like the paper, too, but isn't the line '3 minutes to the second' a trite expression?" The teacher answered that it could be, but she wasn't sure if it detracted from the content. Cindy said she did not think it did, but asked the question: "Is 'lay' right? It dudn' sound right." Yvonne asked, "Should it be that way?" Stu said he meant to write "lie." The teacher responded with an answer and a question to teach the students the correct form and to quiz them immediately after. Unlike during previous sessions, students did not wait to be called upon. They did not raise their hands, but spoke at will, making for smooth dialog. . . democratic learning. Joyce asked, "Is 'field' spelled with 'ie' or 'ei'?" She had circled the word on the paper. Joyce corrected her peer explaining that "i-e" words were a

Self-identity; group identity; cohesiveness.  
Sense of belonging.

Socialization devoted to quality of writing.  
Idiolect.

Socialization devoted to quality of writing.

Individual and group response; independent, critical thinking.  
Social interaction skills.  
Individual and group

problem for most writers. Another student agreed. The teacher confirmed the correct answer. Another student was looking up the word in the dictionary. Joyce, a minority student, sat between two white students. Joyce read with confidence her paper about self-esteem, talking about the detriments of low and the benefits of high. During the silent reading, two students whispered about the content of the paper: "I feel the same way at times." The teacher asked the students what they thought of the content. Joyce kidded, "Well ain't ya gonna say nothin'?" Yvonne answered that there were times that she felt exactly what the paper said. Other students agreed with Yvonne. The teacher directed the students to look at the organization. Mark said, "I think this is Joyce's best paper so far." Frank, "Me, too." The teacher said, "You are right. I am very pleased with the organization of this paper. Joyce has come a long way.

response/independent  
critical thinking.

Self-identity; group  
identity: Racial  
integration. Sense  
of belonging.

Socialization:  
Camaraderie. Sense of  
belonging, informal  
idiolect.

Quality of writing  
improved.

In fact, you all have." Students smiled at one another, proudly. Susan spoke, "You know I think we've been very creative at picking out topics." The teacher said, "You are right; I never thought of that, Sue." Cindy said, "We are gettin' better and better!" The teacher said, "We've become a good team." The next paper read was Greg's. While Greg read, his speech impediment was noted (had difficulty pronouncing "r"), but he read with confidence, unlike at the beginning of the semester. (His hands did not tremble.) During the silent reading, Annette took out her book entitled *Improving Spelling* to look up a word. She then made corrections on Greg's paper. Scanning the room, I saw each student examining Greg's paper. Frank wrinkled his nose and slitted his eyes. Frank leaned over to Mark and asked Mark what did he think. He seemed confused about something he was reading in Greg's paper. Mark

Self identity; group identity. Nicknames were used and accepted by the group.

Quality of writing improved.

Handicapped student (with speech impediment) read with confidence - group identity. Sense of belonging.

Individual and group identity; independent, critical thinking.

whispered, "I think he meant to say. . . ."

The two male students bantered back and forth about topic of the essay: baseball vs. football. The female students remained silent until Cindy complained, "I'm absolutely lost." Greg complained, "I thought everybody knew a little something about baseball. Mark frowned. . . and asked, "Where have you lived all your life?? Baseball is the American sport!" Kevin and Frank laughed. Susan said, "Now wait a minute, tennis could be considered the American sport. And it is not un-American to not know anything about baseball and football." The males and the females scrapped about the significance of the games. Neither side seemed to win the debate. Neither side seemed to mind. Students just laughed at one another for not agreeing. When the topic discussion had been exhausted, the teacher focused on the mechanics of the writing. Stu wanted to know about a

Classifying people/  
females vs. males.

Classifying people/  
females vs. males.

Self-confidence;  
group identity.

sentence that he considered a fragment. Students examined the line for a subject and verb, to discover that there was no verb – the line was, indeed, a fragment sentence. When the class was dismissed, students lingered still talking to one another about writing; some were still talking to the teacher about writing. Almost fifteen minutes passed before the room was cleared of students.

Socialization - sense  
of belonging.

April 4, 1989

Objective: Research Paper Drafts

Students Present: 14

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Observation:

Today there was a substitute teacher. The students were instructed to form small groups and analyze one another's essay. While Annette complained that she wanted feedback from the teacher, other students echoed Annette's sentiment. Students formed small groups. In a short time, the room was humming with students offering one another criticism on how to write effectively. Students referred to dictionaries and textbooks to find answers to problems that arose in the group. For example, Stuart said, "Net, I'm not sure but I don't think you can use single quotation marks like that." He referred to his textbook to confirm his point. Other students followed his lead. The peer made the suggested correction.

Self-confidence: group identity. Nicknames were accepted and used by the group.

Problem solving.

Individual and group response/independent, critical thinking.

Self-reporting.

Individual and group response/independent, critical thinking.

Students consulted one another about the next assignment. Others read to one another without being told to. Students aided one another. Before Mark (red hair) read his essay, Annette patted his arm, as she often did. His red face grew somewhat pink; he appeared to be comforted. Students aided one another. For example, before Mark read, Net patted his arm, as usual. His red face grew pink, as usual. When the class period ended, some of the students left for their next class. Others stayed on and continued their discussion of writing.

Nonverbal communication.

Sense of belonging.



April 13, 1989

Objective: Research Paper Drafts

Continued and Process Papers

Students Present: 13

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Observation:

The beginning of the class period was addressed to teaching students methods of documentation of the research paper (approx. 25 minutes). A straight lecture method was utilized. The desks

Lecture devoted to quality of writing.

remained in straight rows. The students remained quiet as the teacher talked.

Lecture strategy seemed to limit socialization.

When students wished to speak, they raised their hands. Stuart wanted to ask a question and raised his hand, patiently waiting for the teacher to call on him.

When the teacher asked questions, students seemed reticent to respond — even shy. The personality of the class changed from previous times. At 11:25 the class was told by the teacher that it was okay for them to form their circle.

Peer collaboration seemed to enhance socialization.

Annette appointed herself to go first, "I'll

go first this time – I want to see what you think about my story." Annette enthusiastically passed around copies of her paper – standing up to do so. She took her seat and instructed her peers to "follow along" with her reading. As students read, there was little sound except Annette's voice. At some points, Annette corrected her own mistakes. For example, Annette corrected, "I know I should have used the offset indention for that quotation. It is long. But I didn't know how to footnote it." The teacher interrupted, "All right, we'll make note of that and come back to it." The reading took several minutes (approximately 15), which seemed long, but the students appeared interested, circling words and making notes in the margins. The topic of the paper involved oral contraceptives. After the reading, Stu said, "That's a long paper!" The teacher asked, "Does anyone have any suggestions for Annette to shorten her

Self identity; group identity; sense of belonging.

Self identity; group identity; self-reported errors.

paper?" Stu laughed, "She could single-space it!" Others laughed at his joke. "Let's look at the organization and substantiation," instructed the teacher. There was much dialog among the teacher, Annette, Stu, and Mark for a time about organization and mechanics. While Mark said Annette's conclusion should be her introduction, Stu did not agree and gave his reasons. Other students were attentive, watching and listening to their peers. Annette looked at her silent peers and said, "Please, tell me what you think -- I need your help to get a better grade." Cindy spoke up about transitions; Stu addressed the same weakness in the writing. Annette teased, "You should come to my house and tutor me." Stu laughed. Mark contributed to the dialog, "Remember Annette about presenting both sides -- yours and the opposite point of view?" Annette giggled, "Oh yea . . . I forgot." Stuart teased, "But we are still trying to

Sense of Belonging;

jokes.

Group identity - team

work. Quality of

writing.

Self identity; group

identity.

Social interaction skills.

shorten the paper." Annette asked where she should cite the experts. Stuart answered her question, but turned to teacher to ask one of his own. As Stuart and teacher debated an issue, some of the students began chatting with one another. The circle was smaller and lazy; the students appeared comfortable. (Their postures indicated a relaxation: someone sprawled his legs; someone else sat on one leg; someone else twirled her hair and leaned to one side.) The teacher told the group to take the copies of Annette's paper home and make corrections that they could return to her the next time. Joyce and Tonesia looked at one another; Tonesia said, "I *need* more time to look at it."

Social interaction skills:

Camaraderie.

Informality/self  
confidence.

April 18, 1989

Objective: Research Paper and Process

Students Present: 12

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Observation:

Before class, Annette and Yvonne chatter about personal topics, such as Annette's doctor's appointment and Yvonne's hunger. Susan returned to class after having been absent -- it was her turn to read after Tonesia. Susan was one of the students who had trouble reading in front of people. She expressed concern over having to read: "I am so nervous today. I am scared to read in front of the class," she told Cindy. The teacher came in and Tonesia was to read her paper on "Preventing Teenage Pregnancy." As she read aloud, her peers read silently along, jotting down comments in the margins and circling words to be considered later. Since topics were chosen by the students, the papers reflected students' attitudes about controversial issues. Tonesia was

Classifying people/  
emotionally handicapped  
students expresses fear  
of reading aloud.

Individual and group  
response/independent,  
critical thinking.

a minority student addressing a soaring problem. She read about curbing the rise of teenage pregnancy, saying, "Both sexes are responsible – girls and boys."

Tonesia read on, "Teenagers have sex to find love. . . . They need more education on birth control, and how to say 'no.'

Teenagers need counseling if they do become pregnant." Tonesia informed the group that the problem of teen

pregnancy was not limited to one race or socioeconomic group. Many of her peers

agreed with her. Students were asked to take a few minutes, after the reading, to

"jot down their comments." Each student read without whispering to

peers. They appeared serious about the task at hand. Students discussed the

high pregnancy rate in America and agreed that the problem had to be dealt

with before it became a crisis. Susan's brows furrowed; she was frowning, as her pen sped across the paper. Later she

told the group, "Since the female would

Individual and group  
response: Independent,  
critical thinking.

be most accountable to the child, she should take the responsibility." Yvonne vehemently disagreed, "No way! The man should be responsible for his actions. "Come on, Yvonne, you know better. Men have never been the ones to take the responsibility, so the women have to – they still do." Mark argued, "That's not true." Greg shook his head and leaned back in his chair. The group was spirited and actively involved in the discussion. The teacher redirected the discussion to mechanics, directing the students to look for the thesis statement, location and clarity. The students discussed the strengths and weaknesses of the writing. Yvonne commented, "The paper is organized according to the outline, but it is not formal enough to be a research paper. . . is it?" Annette complained that the paper was "just opinion and no facts." The teacher asked the group where Tonesia should add facts. Susan specified certain lines and

Classifying people/  
Issue of males vs.  
females.

Social interaction skills:  
Gentle criticism.

Individual and group  
response: Independent,  
critical thinking.

told Tonesia that there was a good book on sex education that she had and could lend her. Yvonne said, "Yea, there's a film called *Where Babies Come From*, which is excellent. You could look at it and include some of the information in your paper. But Tonesia, make sure you emphasize that the baby is not the mistake. Make it clear that the pregnancy was the mistake that the teenager made." Yvonne gently hit Cindy, asking, "Where is your mouth at?" The students laughed. Cindy said, "I'm not sure about how to match up my authors with the Works Cited page." The teacher explained. Frank asked, "Do we have to double space the Works Cited page, too?" Seriousness seemed to prevail. Documentation appeared tedious for the students as they laughlessly smiled, but asked many questions about research paper writing. Next it was Susan's turn to read her process paper. She kidded, "I'd rather

Individual and group responses: Independent, critical thinking.

Nonverbal communication:  
Touch (casual, friendly).

Self-identity; group identity. Self-reporting errors.

Handicapped student (emotionally) feared reading aloud.



read someone else's paper -- not my own." But Susan read her own paper, articulately and clearly, stumbling over a few sentences. Her face was red. After the reading, she held out her hands, saying, "See my hands shake." The teacher told her, "You did very well." Some of Susan's sentences were long and complex. Stuart joked, "Sue, as long as your sentences are, you could practice underwater swimming." After a few minutes of silent reading, tension was broken when Yvonne asked the question about potting plants. Content helped launch the discussion into mechanics. Frank contributed laughingly suggesting that "the plants would destroy the dining room table." Both the students and the teacher agreed that Susan's paper was very well written. Students rewarded Susan by patting her on the back and telling her what a good writer she was. The next paper to be read was Kevin's. Annette teased the teacher, telling her

Jokes.

Self-identity; group  
identity.

Self-identity; group  
identity: Camaraderie.

Touch and nonverbals.

Social interaction skills:  
Jokes with teacher.

that she should have stapled Kevin's pages since she photocopied them for him. Other students laughed. So did teacher. Kevin read his process paper -- self-consciously, stumbling over some of the words (his writing was good). His topic was "Changing a Tire." His face reddened as he read. After the reading the teacher said, "Give him some help." Cindy piped up, "Where do you put the jack?" Mark tried to explain, adding that "there are different types of jacks, so different places to keep them." Getting students back on task, Yvonne asked about mechanics, "What about this. . . ?" Yvonne instructed Kevin on his spelling of the word *accommodate*. Kevin's shoulder stiffened and he cocked his head as he said, "Oh yea?" He seemed defensive. Annette came to the rescue with humour: "That's okay; we're in delinquent spelling class." Kevin laughed and corrected his spelling, saying, "I should have looked that up."

Social interaction skills:  
Jokes to soften criticism.

Tonesia added, "It's embarrassing to spell a word wrong in this class – you have to face you friends." She grinned. Dawn remained quiet, as usual, although her eye contact was involved with the other students. In addition, she smiled and nodded responding to her peers' comments.

Social interaction skills:

Jokes to soften criticism.

Emotionally handicapped

student maintained

nonverbal communication.

April 20, 1989

Objective: Research Paper and Process

Students Present: 14

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Observation:

Students assembled, arranging their desks in a lazy circle *after* the teacher's lecture on how to structure a definition essay. During the lecture, students sat in their line up seats with the usual spatial bubble, which isolated them from their peers. After the lecture, the class transformed from a clearly structured classroom, with desks neatly placed in specific rows -- to the lazy circle which had little structure, with its shape barely resembling a circle. Some of the students were seated further into the circle closer to friends -- peers. No student isolated himself/herself outside the circle. During the lecture students' eyes focused on the instructor looking down only to jot notes on the topic at hand. During the peer collaborative portion of class

Lecture strategy:

Seemed to limit socialization.

Peer collaborative

strategy seemed to enhance socialization.

Socialization:

Camaraderie.

Sense of belonging.

time, students sat in the lazy circle.

There was a noticeable difference in their demeanor. In the circle, students sat on their legs, leaned back in their seats, and appeared to be more comfortable.

Students sat close enough to touch one another and they did. For example, before moving to her regular place in the circle, Yvonne grasped Annette's hand, expressing support to her about her medical problem. Annette's eyes filled with tears and her face reddened, but the two students interacted in an intimacy not previously observed before. When Cindy took her place, she leaned into Dawn asking, "Did you finish your process essay?" Dawn responded with a smile, "Yea, it wasn't bad." Placing their heads together during the time for jotting reactions in the margins, Kevin and Mark whispered. Since their eyes focused on the essay the exchange was apparently addressing a writing issue. Susan teased her cohorts from across the

Nonverbals seemed to indicate a comfort in the peer collaborative environment.

Touch (affectionate).

Touch (peer concern).

room as one said she had no teeth in her mouth (Yvonne). Susan asked, "What happened to them?" Susan consoled Yvonne for having to be "dressed without her teeth." Students sat with crossed legs and relaxed postures.

Sense of belonging.

April 27, 1989

Objective: Process Mode

Students Present: 12

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Observation:

Annette circulated copies of her essay on how to sew a pillow. Frank cynically remarked, "Oh great! Just what I wanted to know!" Annette nervously laughed at his teasing and began her reading. Greg drummed his fingers on the desk as Annette read through sewing terms: basting, staystitching, seam, gather. Greg rolled his eyes at Kevin. Kevin grinned. Annette stumbled over her words. She stopped reading and said, "This doesn't make sense." Then she asked, "Do I actually have to read this?" The teacher instructed: "This illustrates what your textbook says -- if you don't see your writing for about a week, it will look different to you. You are actually pointing out your own mistakes." Annette continued reading her paper,

Self-identity; group  
identity: Self-reported  
errors.

stumbling over some of her own wording. All other students read along silently – Stuart furrowed his brows, making a serious effort to make sense of Annette's writing. Susan looked up from time to time at Annette, seeming to empathize with her struggling peer.

Nonverbal communication.

Dawn, who rarely spoke, wrote laboriously and looked up from time to time at Annette. Frank patted Annette's shoulder at one point and Annette's reading flowed more smoothly. Mark came in late and sat between Frank and Annette. Annette finished her essay, saying, "It's not a good essay, anyway." Mark and Frank sighed audibly. Susan comforted, "Net, I found it very informative, since it's been a long time since I've sewn." The teacher spoke: "Annette caught many mechanical errors, herself, but let's mention in general what things to look for." Kevin forced a response, "Well, phrasing is off on her paragraphs. I mean the sentences are

Touch and nonverbal communication.

Self-identity; group identity; self-reporting errors.



awkward." Dawn nodded in agreement. The circle was relaxed, as were the students. Posture: Dawn's (age approx. 19) legs were propped up on the chair; Cindy (age approx. 39) sat with her legs spraddled; Susan sat cross-legged; so did Stu; Annette sat on one leg. The teacher explained the use of the semicolon and colon. Cindy gained eye contact with Tonesia who had asked the question; she smiled at her peer. She said, "I needed to know that, too. The teacher redirected the students to Annette's paper: "What about punctuation?" Susan responded, "Commas are where semicolons are supposed to be." Cindy sat with her legs crossed; her chair was angled. She audibly cleared her throat, clownishly, before giving her criticism – as she always did. Cindy said, "Wording doesn't sound right" – she laughed and said, "either like it or poke it." Annette laughed with her classmate, noting the suggested corrections. Mark handed the

Self-identity; group identity; students seemed relaxed and comfortable in the peer collaborative environment.

Quality of writing emphasis;  
Nonverbal communication:  
Eye contact and smile.

Individual and group response/independent, critical thinking.

Social interaction skills:  
Gentle criticism. Jokes.

corrections to Annette – with a smiley face on it. Students moved quickly to the next paper. Cindy read her paper next. She prefaced it with a laugh when the teacher asked the class to examine it. She told the class that this essay was about her father, a waterman, who would "kill me if he knew he knew I wrote this for you all." (She was joking.) She also told the class that *waterman's* language was used in her essay. She had underlined the word cam. In her process essay, Cindy explained the routine of the waterman. Cindy read, "To be a successful clammer you must first get up very early, way before sun up. You should eat a big breakfast, preferably hot. Dress very warm if it's winter time and pack a hearty lunch. Carry a large thermos of coffee and cigarettes if you smoke." Cindy's peers quietly read along with her. Dawn's eyes drank in the words. She stopped at various intervals to smile at Cindy, who was reading.

Sense of belonging;

Idiolect.

Self-identity; group

identity; Local culture explored.

Classifying and describing

people: Local culture.

Annette twirled her hair. Joyce swung her legs. Mark read with a half grin on his lips. Cindy told that the clammer had outsmarted the "marine man" by placing the small clams in the bottom of the basket and the larger ones on top. She said, "The old-timers weren't used to no rules for catchin' clams." She winked and smiled at her peers. Cindy read the last lines of her essay, "After you pick your limit, head on in. Gossip with all the old watermen about your catch. Unload your boat and take your clams to market." Joyce exclaimed, "I loved it!" Stuart teased, "Do you clam with your father?" Cindy quipped, "Often!" The class buzzed with discussion regarding the dying breed of the Eastern Shore. One student kidded that "women had no place on a workboat." There was a debate. Stuart pointed out, "The fact is that women do go out on those workboats -- no matter what some of you think." A minority student shook her head in

Nonverbal communication.

Sense of belonging.

Social interaction skills

Self-identity; group

identity; jokes.

Classifying people/

females vs. males.

Nonverbals.

agreement. One student confessed his grandfather's mischievous adventures on a crab boat. Another expressed concerns about the waterman as a dying breed -- and the pollution of the Chesapeake Bay. Another spoke of the many rules of the marine men. Another spoke of the abuse of the Bay by pleasure boaters. The students were actively involved in discussion when Susan began the discussion on organization and mechanics. Susan said, "I loved your essay! It was certainly well written!" Dawn nodded and smiled at Cindy. The next essay read was Joyce's on how to change the oil in a car. When she read the title of the essay, Kevin winked at Mark, who smiled as if to ask, "How can a woman write about such a process -- a man's job?" Joyce read on. When she completed the reading, Kevin confessed, "I'll bet she can do it better than I can!" There was discussion about how changing the oil has been viewed as

Sense of belonging.

Jokes.

Classifying people/  
females vs. males.

a man's job. Students agreed that women can do it too. Mark was not so convinced. He was surprised that he and she had chosen the same topic about which to write. Students laughed at him.

May 2, 1989

Objective: Definition

Students Present: 13

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Observation:

Since the teacher had so many essays to analyze, she decided to divide the group into small groups of three (four in one case). The groups seemed flexible in that they were accustomed to reading one another's papers and they went to work. The teacher sat with each group for approximately five to ten minutes. Students freely interacted with her and one another. Debates began over mechanics (commas, semicolons, etc.). Students referred to their textbooks to solve problems. Rarely did they ask the teacher to solve the problem. The teacher was busy in that she was having conferences with individual students about respective essays. From the three groups, phrases such as "I like this" and "good job" could be heard. Also, those

Social interaction skills:

Group involved in team effort -- willing to form small groups.

Problem solving.

Individual and group response/independent, critical thinking.

Social interaction skills.

Emphasizing the positive.

same phrases were being spoken by the teacher to individual students. Students and teacher were responding to the writing very positively. Near the end of class, Cindy teased the teacher, "I just gave Susan an "A." The teacher laughed, "Did you look for transitions?" Susan said, "Yes she did -- and they were there this time, too!"

Social interaction skills.

Quality of writing.

May 4, 1989

Objective: Administration of  
Questionnaire B and Writing Sample B

Students Present: 14

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Observation:

Students received questionnaire B and wrote diligently. All eyes observed the questions on the page. Melissa stopped at one point, rolling her eyes, searching her brain for an answer to a question. She then looked at me, smiled, and quickly went to the next question. Cindy took much time, and asked for more time. Dawn was so determined to do a good job that she even came to me and asked how exact she needed to be in her answer for "income." Annette commented aloud on one answer, saying, "Yea, I would rather take another class like this one." Mark and others concentrated and frowned from time to time, very seriously answering the questions. After the administration of

Students' attitudes:

Seemed positive as  
they seriously  
answered the question.

Students' attitudes  
seemed positive about  
peer collaborative learning  
in English Composition.



the questionnaire, the students were asked to write another writing sample (B) for the research project. The teacher wrote the prompt on the board: "Write a well developed essay telling a story about a childhood memory which shaped your attitude toward a person, place, or thing" (250-500 words). One student said, "And this will not be graded. . ." The teacher responded, "No, this essay will not be graded." Students began shuffling through notebooks and backpacks looking for writing tools. Soon sounds diminished and the only audible sounds were students writing.

Students' attitudes toward grades seemed to be linked with fear.

Nonverbal communication.  
Students' attitudes toward writing seemed positive (no sounds of wadding up paper or fingers drumming the desk).

*APPENDIX D*

## KEY INFORMANT INTERVIEWS

First Interview with Susan

February 9, 1989

Researcher: *"What are your feelings about the peer collaboration class?"*

Susan: *"I'm not sure about this class -- I can't read in front of a whole group of people. I never have liked reading or even talking in front of a group. I don't know why -- I envy others who can."*

Researcher: *"How do you think your peers feel about the class?"*

Susan: *"I think everyone is afraid of writing -- and reading in front of the class is worse! We are all very nervous."*

Researcher: *"Would you and your peers prefer to be in a traditional lecture class?"*

Susan: *"I think I like regular teaching better. I'm used to it. But I think Cindy, Joyce, and some of the others like this kind of teaching better. They seem more comfortable than I am."*

Second Interview with Susan

March 23, 1989

Researcher: *"What are your feelings about the peer collaborative class?"*

Susan: *"I don't know. I still get so nervous every time I have to read. But Mrs. Bounds and the others tell me I do a good job. Sometimes I think it would have been easier if I had been in the 101 lecture class. Well, not really. I wouldn't have learned as much. I guess it's not too bad. I am surviving, but I still don't like reading in front of people."*

Researcher: *"How do your peers feel about the class?"*

Susan: *"They are scared but not as much as I am, except for Dawn -- she's probably more so. Most of the others have gotten used to reading out loud in front of the class. Everyone else seems to like it -- they adjusted to it quickly. I'm a perfectionist -- I'm afraid of making mistakes. I want to do things right. After the reading, 'I feel good about myself and I like it when the other students pat me on the back. I mean I don't need it, but -- well, I guess I need it. That's what gives me courage to read the next page.'"*

Researcher: *"Would you and your peers prefer to be in a traditional lecture class?"*

Susan: "Well, I have been working on the problem I have with reading in front of a group. I ended up liking to read in front of the class -- I just needed more practice at it! So, I guess that means that I prefer this kind of teaching to the traditional lecture class. We get more attention in the peer collaborative class, because the class is flexible. My friends really like the way the course is taught -- better than the traditional way. I like the class and my friends really like the class."

### Third Interview with Susan

May 2, 1989

Researcher: "What are your feelings about the peer collaborative class?"

Susan: "I liked the class -- but I was scared every time I read. But, I guess if I was that scared I *should* have read, right? I apparently needed the experience of reading aloud. I used to hide behind the person seated in front of me. I couldn't do that in the circle. In the circle, I learned a lot from my peers."

Researcher: "How do you think your peers feel about the class?"

Susan: "They liked it. They liked reading to their peers. They seem to enjoy coming to class."

Researcher: "Would you and your peers prefer to be in a traditional lecture class?"

Susan: "Nooooooo! Nooooooo! I began a 101 lecture course and I was bored so I left it. It was rigid. Mrs. Murphy was even going to assign us seats! I've sat through many lecture courses -- my mind wanders sometimes. But in the peer collaborative class, you have to be attentive. The pressure is always on to pay attention. As for my peers, they liked the peer collaborative class, too. They were like I was, scared at first, but they liked it. We all got comfortable with one another. I even liked the day Yvonne read the paper about Annette and the others. I knew it was coming! . I would like to add that we all liked the peer collaborative class even during shaky times -- we all experienced English Composition, rather than the English Composition experiencing us! The peer collaborative class was very flexible and gave personal attention to each student."

## INTERVIEWS WITH KEY INFORMANT'S PEERS

Interview with Cindy

April 29, 1989

Researcher: "What are your feelings about the peer collaborative class?"

Cindy: "I like it! I needed these guys or I never would have made it. I'm a high school dropout -- I never thought I could learn how to write. Besides I was bored sittin' in those classes where you had to just listen and take notes. I mean I take notes in this class but I talk a lot, too. I felt kinda alone. But in this class, I had my friends. Of course -- I know I can do it now. Your peers give you faith in yourself. They gave me confidence -- even when I made mistakes. I learned a lot in that class about myself, my peers, and teachers. I never knew teachers were just people who taught." Cindy was touching the researcher's arm. Cindy winked and smiled.

Interview with Dawn

March 23, 1989

Researcher: "What are your feelings about the peer collaborative class?"

Dawn: "I like this class. It's better than my other English classes because sometimes the teacher would talk over our heads. In this class, you get special attention. I'm shy, but I manage to comment every now and then. I even go to the teacher's office sometimes, since I've really gotten to know her.

Researcher: "Would you register for another peer collaborative class?"

Dawn: "Absolutely, I learn more this way."



## Interview with Yvonne

March 23, 1989

As I was leaving class, Yvonne walked behind me and said, "I owe you an apology. I am sorry for the other day, but I needed to get it out of my system. I know other students felt the same as I did about JTPA students and I needed to defend us.

Researcher: "Do you think bringing conflict to the surface was healthy?"

Yvonne: "Yes, I do because after class, Annette and I got together and talked. I told her she had made some comments that hurt my feelings -- and my friends'. She said she was gonna try not to do it again."

Researcher: "What are your feelings about the peer collaborative class?"

Yvonne: "I like it, we get a lot of attention and if something isn't right, we know about it right away and can make it right in the next paper."

Researcher: "Which do you prefer, lecture or peer collaboration?"

Yvonne: "Without a doubt, this kind. In high school I got bad grades in English -- now I am getting almost a "B" -- about a 78% average!

Interview with Stuart  
March 1989

As I was walking across campus, I met Stuart.

Researcher: "How do you like the peer collaborative class?"

Stuart: "I like this way of learning. I'm involved at all times -- talking to other people about writing and everything. It's like therapy!"

INTERVIEWS WITH THE TEACHER  
January 1989 - May 1989

Researcher: "What do you think is the significance of the nicknames in the class?"

Teacher: "I believe they are indicators of how students feel about themselves and one another. Nicknames are students' ways of being social with one another to achieve a sort of identity within the group. They seem to share an affection for one another and show it oftentimes without words."

Researcher: "Do you believe that self-identity and group identity are linked in the peer collaborative classroom?"

Teacher: "Yes I do. I mean these students are role playing . . . they are assuming the role of students -- and students in a different kind of class, so they need to feel accepted as individuals in this group."

Researcher: "Why do jokes seem to be prevalent in the peer collaborative classroom?"

Teacher: "Jokes sort of help the students bond with one another. Students are friendly with one another through joking. Jokes . . . accompany self-reporting of errors; they seem to enable students to feel more comfortable

with their roles as writers in a group. I encourage jokes and self-reporting of errors."

Researcher: "What happened in the peer collaborative class when Yvonne read her essay on JTPA students and nonfederally funded students?"

Teacher: "Well, I think a great deal was happening. While we were all very uncomfortable with the topic and the language used by Yvonne, the conflict had a positive outcome. Students got to know one another on a more informal level. Plus they had to work with one another closely for an entire semester, so they had to seek ways to 'mend their fences.' I think they may have grown from the skills that it took to 'mend those fences.'"

Researcher: "What is the advantage of allowing students to choose their own topics for writing?"

Teacher: "Students need to feel comfortable with the topics that they write about -- after all in the peer collaborative class, there is a rather active, participating audience. I find that students like to find topics that they want to share with their peers."

Researcher: "Do you think that students write only for an audience?"

Teacher: "Not necessarily. Students in the peer collaborative writing class are certainly aware of a live audience, but I think students develop a writing identity as individuals."

Researcher: "Is there any significance in the female-male debates?"

Teacher: "There is always going to be the battle of the sexes, so students need to gain a better understanding of where they stand on various issues. In a peer collaborative classroom, open debates are encouraged. And frankly, I think debates encourage students to participate in class. Debates are a way of socializing students to the real world, so to speak. If you will recall, after the essay on car maintenance, students seemed to have a better understanding of one another. You could say they respected one another's point of view. This should have a bearing on audience awareness."

Researcher: "But what does this debating/socialization have to do with writing?"

Teacher: "Students will learn to write for practical purposes -- they may even learn to like writing. If they like to write, they may write more often and better!"

Researcher: "How do racial differences affect the peer collaborative class?"

Teacher: "Initially, the students remain seated with students of the same race. But soon after the semester gets started, students intermingle -- I think because of similarities in personality. Students socialize with one another in this peer collaborative class, so they get to know one another, and they do not seem to allow race to be a problem. It is a problem in America, and I don't deny its existence. But it truly does not seem to be a problem in the peer collaborative class. Students must work together to achieve a common goal."

Researcher: "There are some students with handicaps in the class. Do students have difficulty with hypersensitivity?"

Teacher: "Perhaps, at first. Each handicap must be dealt with. But Stuart dealt with his handicap. He represents all the others. . . . He seems to like the group activity and has benefitted a great deal from it. He ended up really liking the other students and the other students really liked him. The wheelchair seemed visible at first, and then it kind of disappeared. Greg's speech impediment was a stumbling block for him, but when he recognized that the other students did not find it a problem, he was okay. Greg even thanked his peers for their criticism!"

Researcher: "What about Dawn, the student who would not read in front of the class?"

Teacher: "As you know, I had some concerns about how Dawn would work out in a peer collaborative class. But she did fine. Students seemed to accept

her, in spite of her handicap. I think socializing and camaraderie with the students actually helped Dawn to improve her writing."

Researcher: "In your informed opinion, does subgrouping work in the classroom?"

Teacher: "I believe that subgrouping works only after students have been trained or socialized to working in a group, without constant teacher direction. Students are faced with the problems of having to determine what method of introduction best suited a particular topic, diction, method of discourse, paragraph development, transitions, and method of conclusion. After students have worked in a large peer collaborative group, yes, I think they work quite well in small groups. They are given a problem and solve it quite readily. Students seem to like solving problems, and I think it helps them to become more effective writers."

Researcher: "Do you like the peer collaborative teaching strategy?"

Teacher: "Yes, I do. But it does not come without problems for both the teacher and the student. Both must be trained to use it."

APPENDIX E



ENG 101 Course Schedule Spring 1989

DATE	WRITING DUE	GROUP CRITIQUING	READING	CLASS DISCUSSION
JANUARY 24 (T)	*Examples Theme			Introduction to Course Use of Xerox Machine Narration/Description Assignment
January 26 (R)			LB 2-28; 38-56 PA 1-14 (Writing An Essay) 111-120 (Examples); 17-26; 42-46 (Narration) 67-76; 83-87; 100-108 (Description)	Procedure for Critiquing Grading Checklist Revising Sample Theme Research Paper Instructions
January 31 (T)	Narration/Description Theme	Narration/Description Theme	LB 462-480; 23 (Research)	
February 2 (R)				Library Tour
February 7 (T)	Research Paper Thesis Statement	Thesis statements Narration/Description Theme	LB 57-104 (Paragraphing, Coherence)	
February 9 (R)		Narration/Description Theme		How to Write a Critique

\*In-Class Theme

ENG 101 Course Schedule Spring 1989

DATE	WRITING DUE	GROUP CRITIQUING	READING	CLASS DISCUSSION
February 14 (T)	*Critique Theme		LB 95-98 (Introductions & Conclusions)	
February 16 (R)		Critique	PA 399-412; 419-423; 442-450; 490-498 (Argument & Persuasion)	Argument & Persuasion Research Paper
February 21 (T)		Critique	LB 480-502 (Research)	
February 23 (R)		Critique	LB 502-557 (Research)	Research Techniques- Bibliography Cards, Note Cards, Plagiarism
February 28 (T)	Bibliography Cards (5)	Bibliography Cards	LB 32, 96-87 PA 157-167; 173-178; 179-182 (Comparison)	Comparison Assignment
March 2 (R)	Comparison Theme	Comparison Theme	LB 68-89 PA 233-262 (Cause and Effect)	Research Techniques- Note Cards, Plagiarism, Citing Sources

\* In-Class Theme

ENG 101 Course Schedule Spring 1989

DATE	WRITING DUE	GROUP CRITIQUING	READING	CLASS DISCUSSION
March 7 (T)	Note Cards (5)	Note Cards Comparison Theme	PA 285-292 (Cause & Effect)	
March 9 (R)		Comparison Theme	LB 34-36, 904-908 (Outlining)	Outlining, Editing & Revising
March 14 (T)	Research Paper Outline	Research Paper Outline		
March 16 (R)	Logic Exercise Journal		PA 399-412 LB 105-130 (Logic)	Logic
March 21 (T)	Research Drafts	Research Drafts	LB 400-422 (Diction)	
March 23 (R)		Research Drafts		

\*In-Class Theme

ENG 101 Course Schedule Spring 1989

DATE	WRITING DUE	GROUP CRITIQUING	READING	CLASS DISCUSSION
April 4 (T)		Research Drafts		
April 6 (R)		Research Drafts	LB 89-90 PA 199-207; 227-233; (Process)	
April 11 (T)	*Process Theme			
April 13 (R)	RESEARCH PAPERS	Process Theme		
April 18 (T)		Process Theme	LB 423-434 (Dictionaries)	
April 20 (R)			LB 425-427 (History of English) LB 84-85 PA 309-317; 337-341 (Definition)	Oxford English Dictionary History of Language Definition Assignment

\*In-Class Theme

ENG 101 Course Schedule Spring 1989

DATE	WRITING DUE	GROUP CRITIQUING	READING	CLASS DISCUSSION
April 25 (T)	*Definition Theme			
April 27 (R)		Definition Theme	LB 42-56 (Review)	Revising
May 2 (T)		Definition Theme	PA 111-120; 121-127; 145-153 (Examples)	
May 4 (R)	*Examples Theme			
MAY 8-11 FINAL EXAM	*Examples Revision			

\*In-Class Theme

APPENDIX F

## HOW TO BE A SUCCESSFUL CLAMMER by Cindy

To be a real success as a clammer you must first get up very early, eat a big breakfast, preferably hot. Dress very warm if it's winter time and pack a hearty lunch. Carry a large thermos of coffee and cigarettes, if you smoke.

Go out and start the truck. Let it run about a half an hour. That's what all the old watermen do. It's part of their routine.

When the truck is warm enough, ride down to the dock and park by the water with all the other watermen. Then wait for the sun to come up. All the old watermen do this. They say if the wind is gonna blow, it'll blow when the sun comes up.

If it is too windy to work, go home and back to bed. If it is cam out (watermen language) you can start loading the boat. Gas up and head on out (watermen language). Watch for crab lines along the shoreline.

Pick your spot and let down the conveyer. Make sure you know the limit on clams. When I was working, forty bushels were allowed.

Clam's also have to be picked by a standard size, two inches when I was working. The marine police pull regular checks, so make sure you keep a bushel of standard size clams. If you see them coming, dump these on top of all those little ones you picked! Be careful, there's a pretty heavy fine. I can't remember how much. I would have to ask Dad.

After you've picked your limit, head on in (watermen's language). Gossip with all the old watermen about your catch. Unload your boat and take your clams to market.

Now you can go home and eat a hearty dinner. Just like Dad and all the other local watermen.

Purpose: To tell people what fun it is to be a local waterman.

Audience: People who would be interested in clamming as a career.

[Student's Errors Included]

## HOW TO CHANGE THE OIL IN YOUR CAR by Joyce

Before you start you need to get a few things together. To begin to change the oil, you need a pan, an old pan that holds about 6 quarts of fluids. You have to buy 5 quarts of oil to replace the oil that is drain from the car, also buy a oil filter for your car too. find a wrench the size of the bolt to the oil pan and a oil filter wrench too. Get a couple of old rags to wipe excess oil from your hands and around the oil pan.

Now after getting all this together we can now change the oil in the car. Put the pan that you are going to use to catch the oil under the oil pan where the bolt is to drain it. Take the bolt wrench and remove the bolt to drain the oil.

After all the oil is drained from the oil pan into the catch pan, remove the oil filter and let that little bit of oil drain. Put the bolt back in the oil pan, make it tight enough where oil will not leak out.

When all the oil has drain from the filter area take the old rag that you have and wipe around the filter area where oil drained from. Take the new filter and replace it where the old filter was removed. Tighten it just so only no oil leaks out of it.

Remove the catch pan from underneath the car. Lift the hood of the car. Put the five quarts of oil you brought in the car. Where it says oil on the side of the motor. Remove the cap and put the oil in.

Pull the dipe stick out to check the level of oil in the car make sure that it is to the full mark on the dipe stick. When it is put the dipe stick back and close the hood of the car.

You are now done changing the oil in your car.

Take the old oil you remvoed to a salvage yard.

Audience: Anyone wanting to change the oil in a car.

Purpose: To let someone know.

[*Student's Errors Included* ]