

EXAMINING THE RELATIONSHIP BETWEEN GROUP WORK
AND STUDENTS' WILLINGNESS TO PARTICIPATE

by

SARAH R. RAGUSA

B.S., South Dakota State University, 2008

A THESIS

Submitted in partial fulfillment of the requirements for the degree

MASTER OF ARTS

Department of Communication Studies, Theatre, and Dance
College of Arts and Sciences

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2010

Approved by:

Major Professor
Dr. LeAnn Brazeal

Copyright

SARAH R. RAGUSA

2010

Abstract

In this thesis study, the use of group work as an instructional strategy was assessed to determine the effect it has on students' willingness to communicate, communication apprehension, and self-perceived competence. Students enrolled in a basic public speaking at a major Midwestern university completed Neer's (1987) Classroom Apprehension about Participation Scale (CAPS) at the beginning of the semester and again four weeks later after being exposed to a treatment of *group* or *no group*. Results indicated students' willingness to communicate and self-perceived competence increased over the four-week duration of the study regardless of treatment. However, a significant reduction of communication apprehension was seen in students using group work in their classrooms. Limitations and implications are discussed.

Table of Contents

List of Tables	vi
Acknowledgements.....	vii
Dedication.....	viii
Preface	ix
CHAPTER 1 - Introduction	1
CHAPTER 2 - Review of Literature.....	8
Willingness to Communicate.....	9
Communication Apprehension	11
Self-perceived Competence	12
Group Work	13
Rationale for Hypotheses.....	20
CHAPTER 3 - Methodology	22
Sample	22
Procedure	23
Instrument.....	24
Variables	25
Statistical Analysis.....	28
CHAPTER 4 - Analysis & Results	29
Willingness to Communicate.....	29
Communication Apprehension	30
Self-perceived Competence	31
CHAPTER 5 - Discussion	32
Discussion.....	32
Hypothesis 1.....	32
Hypothesis 2.....	33
Hypothesis 3.....	34
Implications	36

Limitations and Future Research	37
References.....	41
Appendix A - Protocol	55
Group Work	55
No Group Work	55
Appendix B - Treatment Protocols	56
Group Work	56
Class Period 1 – Orientation (Syllabus).....	56
Class Period 2- Decision Making and Decision Factors (Chapters 1 & 2).....	56
Class Period 3 – Global and Local Decisions (Chapter 3).....	59
Plagiarism Worksheet	60
Class Period 4 – Narration (Chapter 4).....	61
Narration Worksheet.....	62
No Group Work	63
Class Period 1 – Orientation (Syllabus).....	63
Class Period 2- Decision Making and Decision Factors (Chapters 1 & 2).....	64
Class Period 3 – Global and Local Decisions (Chapter 3).....	66
Plagiarism Worksheet	67
Class Period 4 – Narration (Chapter 4).....	69
Narration Worksheet.....	70
Appendix C - The CAPS.....	72

List of Tables

Table 1: Factor loadings and communalities based on a principal component analysis with Varimax rotation for 20 items from the Classroom Apprehension about Participation Scale (CAPS) (N = 560)	27
Table 2: Means and standard deviations for Variable 1 – <i>Willingness to Communicate</i>	30
Table 3: Means and standard deviations for Variable 2 – <i>Communication Apprehension</i>	30
Table 4: Means and standard deviations for Variable – <i>Self-perceived Competence</i>	31

Acknowledgements

I would like to recognize and thank my committee chair, Dr. LeAnn Brazeal, and my committee members - Dr. Nicole Laster and Dr. William Schenck-Hamlin - whose guidance, constructive criticism, and support have been extremely helpful and motivational.

Thank you to my husband, Paul Ragusa, and to my family for your continued patience and encouragement. Without you, I never would have made it this far.

Finally, to all those friends, colleagues and professors who have assisted me during this project and throughout my education; whether or not your names appear here, your support is remembered and appreciated.

Dedication

For my family: To my parents, Kevin and Becky Lindsay, for taking the time to teach me the joy and the importance of education. To my grandma, Janet Lindsay, for always finding a way to make learning fun. To my brother, Casey Lindsay, for trying new things with me. And to my husband, Paul Ragusa, for sharing in my passion of knowledge.

For my students; past, present, and future.

Preface

As an instructor, I have had the experience of teaching courses where students participate frequently, the classes flow well, and all involved feel like the course was a success. On the other hand, I have also had quite the opposite experience, where it is a regular struggle to get students to ask questions and participate in discussion. I noticed that there appeared to be a significant difference in the academic outcomes between the students who participated and those who did not. Students who willingly participated quite often did considerably better on homework, quizzes, and assignments, than students who did not participate. I began to think about strategies I could apply that might create an atmosphere that encouraged and *promoted* student participation. That is where this study began.

CHAPTER 1 - Introduction

In traditional college and university classrooms, where lecturing still dominates as a mode of delivery, students tend to be passive receivers of information. The recent three decades have created a paradigm shift in how learning is facilitated in higher education. Scholars and educators alike are advocating a move away from the traditional, instructor-led teaching, where the student role is that of a passive recipient of knowledge, toward instructional strategies that permit students to play an active role in their own learning process (Dallimore, Hertenstein, & Platt, 2006). A natural extension of this discussion has been an appeal to instructors to utilize instructional strategies designed to actively engage students in the teaching-learning process and to address specifically the multiple learning styles of students by incorporating a broad range of instructional strategies into their teaching (Nyquist & Wulff, 1990; Wulff & Nyquist, 1999). Research shows learning is an active process, not a passive one; thus, students, regardless of their learning style, learn best when they are actively involved in the process (Davis, 1993; Petress, 2006). Encouraging students and providing them with opportunities to actively take part in their own learning processes promotes the idea of a deeper learning that enables students to make sense of the material and reconstruct it for application to their daily lives (Beekes, 2006; Johnston, James, Lye, & McDonald, 2000). According to Bok (2006), undergraduate higher education should be enabling students to develop the ability to communicate and to think critically. As noted by Rubin and Graham (1988), “in all classes, students must be able to ask and answer questions, summarize opinions, distinguish fact from opinion, and interact with peers and instructors” (p. 14); essentially, students must be able to participate. Petress (2006) points out that classroom participation is a major vehicle toward achieving this deeper level of quality learning.

Classroom participation has been defined as “the number of unsolicited responses volunteered” (Burchfield & Sappington, 1999, p. 290). It comes in many different forms such as the extent to which an individual student partakes in asking questions and making comments, overtly seeking information from the instructor and classmates, and the degree to which the student is involved in classroom interactions orally or non-verbally (i.e., nodding, raising one’s hand) (Cunconan, 2002; Darling, 1989; Fassinger, 1995b; Kendrick & Darling, 1990; Meyers, 1998b; Myers & Knox, 2001). There is strong evidence for the importance of participating in class (Lyons, 1989; Petress, 2006; Weaver & Qi, 2005) and the benefits stemming from classroom participation are numerous. Participation is a way to bring “students actively into the educational process” (Cohen, 1991, p. 699) and “provides students with opportunities to learn and practice their knowledge and strategies, to explain their reasoning, and to examine their thinking processes and recognize the need to revise thinking” (Turner & Patrick, 2004, p. 1760).

Participation forces students ‘to ‘think.’ In formulating arguments about the topic in question, students inevitably go through a valuable cognitive process; they crystallize ideas, subject such ideas to their own scrutiny, and finally articulate these thoughts (Crone, 1997; Garside, 1996).

Classrooms provide a space for the exchange and examination of ideas and offer the opportunity to give and receive feedback. Participating in these interactional activities help student to develop skills of analysis and evaluation, giving them the occasion to practice the course material and apply it to their daily lives; thus actively partaking in the learning process. Through participation, such as discussion sessions, with peers in the classroom, students are also exposed to the many different ways in which the material can be analyzed and applied (Jiang, 2009; Turner & Patrick, 2004; King, 2002).

The link between students' classroom participation and their academic achievement is undeniable. Students are more motivated (Junn, 1994), learn better (Daggett, 1997; Weaver & Qi, 2005), become better critical thinkers (Crone, 1997; Garside, 1996), and have self-reported gains in character (Kuh & Umbach, 2004). However, despite these benefits, the degree to which students participate varies drastically (Turner & Patrick, 2004). Participation is a central element of students' learning; Fritschner (2000) found that most students believed participation was "essential" to their own learning. Though students see participation as important, and one-third would like to participate more (Wade, 1994), research suggests that it is not happening, as it is only a handful of students in any given classroom who participate regularly (Howard & Henney, 1998; Fritschner, 2000). Howard and Henney (1998) found that about ninety percent of interactions were made by a handful of students and only one-third were regular participators, while half of the observed students did not participate at all. Although instructors, researchers, and students all appear to recognize the importance of and seemingly want to increase participation, many students do not participate. There are various reasons, both speculative and empirically supported, that students fail to participate in class; most fall under the overarching factor of students' willingness to communicate, or participate (Chan & McCroskey, 1987; Clark & Yaeger, 1995; Rubin & Graham, 1998).

Willingness to communicate (WTC) has been defined as the probability that an individual will choose to communicate, specifically to talk, when free to do so (McCroskey & Baer, 1985). While talking is central to interpersonal communication, people differ in the amount of talk in which they will choose to engage. WTC reflects the stable predisposition to talk in various situations and is fundamentally seen as a personality trait. McCroskey and associates have shown that WTC is related to such attributes as communication apprehension, perceived communication

competence, introversion-extraversion, self-esteem, and so forth (MacIntyre, Dornyei, Clement, & Noels, 1998). Although WTC has been conceptualized explicitly as a personality trait, it is not necessary to limit WTC to a trait-like variable.

MacIntyre (1994) proposed a situational definition of WTC. WTC is thus redefined as a predisposed readiness to enter into discourse at a particular time with a specific person or persons as WTC may be influenced by the receiver/context of the situation (McCroskey, 1992). McCroskey (1992) surmises that it is very reasonable to assume that individuals will be more willing to communicate with some kinds of receivers than with other kinds and will be more willing to communicate in some contexts than in other contexts. Turner and Patrick (2004) found that student participation in the classroom reflects unique combinations of personality factors and the opportunities and constraints of the classroom context. Turner and Patrick (2004) summarize this by suggesting, “work habits, like other behaviors, arise from the interaction of both characteristics of students and of the learning environments” (p. 1759). Classroom environments communicate purposes and meanings for engaging in academic tasks to students (Turner & Patrick, 2004), but it is the students’ perceptions of these messages that determine the extent to which they participate in the classroom. Chan and McCroskey (1987) found that students’ classroom participation was initially affected by their willingness to communicate.

Scholars across academia can agree that communication is fundamentally an interactive phenomenon (Scott-Phillips, 2010). Participation, as well, is an interactive process of exchanging information, verbally or non-verbally (Dancer & Kamvounias, 2005; Rocca, 2010). Because classroom participation fundamentally requires communication, the use of the terms ‘willingness to communicate’ and ‘willingness to participate’ are interchangeable.

Classroom participation has become increasingly important with Millennial generation students who demand more interaction from their classroom experience (Allred & Swenson, 2006; Howe & Stauss, 2000). Additionally, as classroom participation promotes clear-thinking, deeper learning, and ultimately knowledge, educators should be intensely interested in ways in which to encourage and promote students' willingness to communicate and active participation in the classroom (Handelsman, Briggs, Sullivan, & Towler, 1005; Rocca, 2009). Neer and Kircher (1989) suggest that participation in the classroom may be moderated, in part, with instructional design. Given this, it is necessary to identify instructional factors that influence students' willingness to participate.

Students' classroom participation has been documented by scholars as early as 1958 (Rocca, 2010), where Brown and Pruis offered their reasons for the importance of, and suggestions for encouraging participation. In a 1980 literature review, Daly and Korinek (c.f., Rocca, 2010) made arguments for instructional communication researchers to study classroom participation. Previous studies have established factors such as classroom climate (a consequence of interpersonal approval) (Berdine, 1986; Bowers, 1986; Gleason, 1986; Neer, 1987; Weaver & Qi, 2005), classroom structure (i.e., seating arrangement) (Booth-Butterfield, 1988; Bowers, 1986; Brown & Pruis, 1958; Fassinger, 1995b; Fritschner, 2000; McCroskey & McVetta, 1978), graded participation (Fassinger, 1995b; Lyons, 1987), cold-calling (calling on a student regardless of a raised hand) (Dallimore, Hertenstein, & Platt, 2006), and the use of technology (Allred & Swenson, 2006; Arbaugh, 2000; Bump, 1990; Davis, 1993). However, no studies have attempted to establish group work, specifically, as a possible factor influencing students' willingness to participate in the classroom.

Group work is rapidly becoming a central feature of many college courses and is used extensively across academic disciplines (Adams & Slater, 2002; McKinney & Graham-Buxton, 1993; Payne & Monk-Turner, 2006; Warnemunde, 1986). The majority of the group work research has been conducted in the field of social psychology (Campbell & Mayer, 2009). In fact, group dynamics has been a core area of social psychology for a number of years (Clement, Dornyei, & Noels, 1994). It concerns the scientific analysis of the dynamics of small group behavior, focusing on issues such as group formation and development, group structure, and group processes. Collective motivation and group cohesion are two concepts central to the study of group dynamics. Collective motivation suggests that group members' become interdependent over time and feelings of cohesion materialize. Group cohesion – group members' feelings of commitment to the group (Carron & Brawley, 2000; Dion, 2000) – is an “emergent affective state” (Klassen & Krawchuk, 2009, p. 103) that is argued to develop through a group members' shared experiences, in turn positively influencing group performance.

From a Vygotskian perspective (e.g., Vygotsky, 1978), learning is socially constructed during interaction and activity with others. Research on group learning (Cohen, 1994; O'Donnell & King, 1999; Webb & Palincsar, 1996) has shown that the interaction between and among learners in a group influences the cognitive activity that is occurring, and it is this cognitive activity that accounts for the learning that takes place. Group cohesion has been studied by psychologists and sociologists interested in a range of groups including families, sports teams, the military, workplace groups, nations, and political groups (Klassen & Krawchuk, 2009; Lee & Farh, 2004); however, no research has been conducted on the relationship between group work and student participation in the classroom. Group work in the classroom has been shown to increase test scores (Michaelsen, Knight, & Fink, 2002), student motivation (Ciani, Summers,

Easter, & Sheldon, 2008), and student awareness of learning and retention (Hendry, Heinrich, Lyon, Barratt, Simpson, Hyde, Gonsalkorale, Hyde, & Mgaieth, 2005). Thus, group work ought to be considered as a strategy for encouraging and promoting classroom participation in relation to students' predisposed willingness to communicate.

It is important for educators to understand how this already commonly used classroom activity can be used as an instructional tactic for encouraging and promoting students' willingness to participate and thus take an active role in their own learning process. Therefore, the purpose of this study is to investigate the relationship between group work, as an instructional strategy for encouraging student participation and students' predisposed willingness to communicate in a classroom setting.

Chapter two will review literature regarding willingness to communicate and provide a definition of group work and its uses in the classroom. The methodology will be explained in Chapter three; including the instrument used and the data collection process. Chapter four will explore the results of the data and will analyze the relationship between group work and students' voluntary participation. The conclusions, limitations, and implications for future studies will be discussed in Chapter five.

CHAPTER 2 - Review of Literature

Models for developing quality learning in higher education, as well as teaching tips on ‘something that works,’ certainly exist in education literature (De Vita, 2000). Indeed, it is important to recognize these models; however, it is important to understand how educators can modify their instructional methods specifically so as to engage as many students as possible as active participants in the learning process. Although most higher education faculty would agree that the critical thinking that comes of active learning is a primary skill that all undergraduates should be utilizing and enhancing, it is not uncommon for instructors to do little regarding this (Bok, 2006). Certainly, “passive lecturing and drill can help students memorize rules and concepts,” but educators need to promote ways for students to apply the material (Bok, 2006, p. 116). The traditional lecture-only format is losing its prevalence in the classroom, as it is replaced with mixed delivery methods which utilize group discussion, dyadic work, and peer review, to name a few, all of which minimize lecture (Rocca, 2010). Employing student participation creates a deeper, and more desired, level of quality learning that is ultimately paramount for college students.

This study will observe the relationship between the predisposed level of students’ willingness to communicate in the context of a higher education classroom and group work as an instructional strategy and means to encourage essential participation. In order to understand the potential influence group work may have on students’ willingness to communicate, it is critical to first explore the definitions of, and the factors influencing, Willingness to Communicate (WTC), as well as conceptualize and operationalize Group Work as a means for instruction.

Willingness to Communicate

Willingness to communicate (WTC) represents an individual's predisposition to willingly communicate, or not communicate, in various situations and with various individuals (McCroskey & Baer, 1985; Turner & Patrick, 2004). An individual's WTC is measured as either high or low in willingness to communicate (Zakahi & McCroskey, 1986). An individual high in willingness to communicate chooses more often than not to communicate; conversely, an individual with a low willingness to communicate will avoid communicating. Intuitively a high level of WTC seems beneficial under most conditions: to be unwilling to communicate is to relinquish a key process for building relationships and interpersonal influence.

Willingness to communicate was originally conceptualized as a personality trait and therefore stable and trait-like, with individuals showing consistency in the degree to which they choose to talk, or not to talk, across contexts and receivers (McCroskey & Baer, 1985). Indeed, WTC is "the one, overwhelming communication personality construct which permeates every facet of an individual's life and contributes significantly to the social, educational, and organizational achievements of the individual" (Richmond & Roach, 1992, p. 104); however, studies have shown that an individual's level of WTC not only influences behavior, but is also influenced by communication situations (McCroskey & Richmond, 1990). Thus, WTC is not only stable and trait-like, but also situational.

Research indicates that an individual's WTC is likely influenced by the receiver and/or the contexts (McCroskey, 1992). For example, we might expect most individuals to be more willing to communicate with friends in a dyadic context than to communicate with a group of strangers in a public speaking context. Additionally, situations that result in high levels of communication apprehension (i.e., performing a specific task, interacting with strangers, concern

of self-image) may negatively influence individuals' WTC (Combs, 1990; Donovan & MacIntyre, 2004; McCroskey, 1992; Neer & Kircher, 1989). Donovan and MacIntyre (2004) also propose that social factors might impact individuals' willingness to communicate.

A study by Clark and Yaeger (1995) indicated an existing correlation between classroom participation and students' willingness to communicate based on their conceptual similarities. However, classroom participation is studied as a situation-specific instance of willingness to communicate (Neer, 1987).

Despite the situation-specific occasion of the classroom, a number of factors have been identified as influencing participation in the classroom. Situational influences include class size (Gleason, 1986; Howard & Henney, 1998; Neer, 1987; Weaver & Qi, 2005), seating arrangements (Brown & Pruis, 1958; Bowers, 1986; McCroskey & McVetta, 1978), instructors' lecture style and non-verbal behaviors (Cohen, 1991; Fritschner, 2000; Gleason, 1986; Rocca, 2009), graded participation (Dallimore, Hertenstein, & Platt, 2004), and the type of course (Bowers, 1986). Individual difference variables such as motivation (Hashimoto, 2002; MacIntyre et al., 2001), personality (MacIntyre & Charos, 1996), attitudes towards others or the situation (Yashima, 2002; Yashima et al., 2004), and gender and age (MacIntyre et al., 2002; Weaver, 2004) have also been found to be predictive signs of WTC in the classroom, among which two individual difference variables - self-perceived competence and communication apprehension - are the underlying key antecedents (Baker & MacIntyre, 2000, 2003; MacIntyre, 1994; MacIntyre et al., 2001).

Self-perceived competence is an individual's evaluation of their own ability to communicate (McCroskey & McCroskey, 1988) and communication apprehension is anxiety associated with communication events (McCroskey & Richmond, 1987). Given that self-

perceived competence and communication apprehension are important variables in supporting a student's participation, our understanding of WTC is incomplete without a consideration as to how these factors might be affected. An issue of potential difficulty for the communicatively apprehensive individual that has received limited research attention and yet one that is evident when studying willingness to communicate is apprehension about classroom participation.

Communication Apprehension

Communication apprehension, specifically classroom apprehension, is operationalized as the "avoidance of participation prompted by evaluation apprehension or expectation of negative outcomes associated with participation" (Neer, 1987, p. 157). Ultimately, the highly apprehensive person is one who attaches high levels of punishment or non-reward to communication encounters. This individual is fearful of communicating orally, seldom enjoys talking, and will go to extreme lengths to avoid communication situations (Fritschner, 2000; Howard & Henney, 1998; Weaver & Qi, 2005). In the classroom, the apprehensive student participates less during classroom activities, doesn't volunteer during classroom discussion sessions, and often avoids and/or drops out of classes that require a great deal of communication. Clark & Yeager (1995) posit that students must possess at least a minimal level of communication skill for successful participation in the learning process.

Communication apprehension is one form of affective competence that influences self-perceived communication behavior (Rubin, Rubin, & Jordan, 1997). Literature suggests that self-perceived communication competence increases when apprehension is reduced (Chesebro, McCroskey, Atwater, Behernfuss, Cawalti, Gaudino, & Hodges, 1992; Rosenfeld, Grant, & McCroskey, 1995; Rubin, Rubin, & Jordan, 1997).

Self-perceived Competence

Self-perceived competence refers to the self-evaluation of one's own ability to communicate in a given situation (McCroskey, 1982). The perception of being able to complete a communication task may be more important than the actual, objectively defined, competence in generating a willingness to initiate communication (Baker & MacIntyre, 2000). "Since the choice in deciding whether to communicate is a cognitive one, it is likely to be more influenced by one's perceptions of competence (of which one is usually aware) than one's actual competence (of which one may be totally unaware)" (McCroskey & Richmond, 1991, p. 27).

Confidence gained by classroom experience may impact students' willingness to communicate. This is evidenced by the fact that students who are young, inexperienced, and immature are less likely to participate in class (Berdine, 1986; Wade, 1994; Weaver & Qi, 2005); whereas nontraditional students (generally defined as those 25 years of age or older in undergraduate programs) are more likely to participate (Fritschner, 2000; Howard & Henney, 1998; Weaver & Qi, 2005). Fritschner (2000) speculates nontraditional students are more likely to be concerned with what the instructor thinks while traditional students are more likely to be concerned with what their peers think, and either could prevent students from participating. Fritschner (2000), Howard and Henney (1998), and Weaver and Qi (2005) all noted that students who feel intimidated or inadequate in front of their classmates and professors choose not to participate. Students reported confidence as the key factor for their participation in several studies (Fassinger, 1995a,b; Wade, 1994; Weaver & Qi, 2005). Rubin, Graham, and Mignerey (1990) noted significant increases in self-perceived competence over four years of college; Brown (1994) attributes this to the likeliness that classroom interaction turns classmates from strangers to acquaintances creating a more comfortable atmosphere for the high apprehensive.

Neer and Kircher (1989) found that high apprehensives were more likely to participate once they got to know their classmates. The key then is to create a relaxed and non-threatening atmosphere in the classroom for optimal learning for the majority of students (Jiang, 2009). When students were given the opportunity to talk about the material with a classmate before discussing it with the entire class, they were more likely to participate (Fassinger, 1995a; Neer, 1987; Neer & Kircher, 1989; Wade, 1994). Wilcox (1994) suggested allowing students to go over their answers with a partner or in a group before stating the answers out loud to the class.

Group Work

A group is a “collection of interacting persons with some degree of reciprocal influence over another” (Schmuck & Schmuck, 1975). Early social psychologist William McDougall (1920) proposed the notion that people working together possess a “group spirit... which renders possible truly collective volition; this in turn renders the actions of the group much more resolute and effective than they (otherwise) could be” (p. 89). Psychologists after McDougall have continued exploring the notion of collective motivation, because work, social, and learning groups are frequently used in everyday life. Collective motivation is a concept constructed theoretically as a dynamic property that emerges from interactions among group members (Klassen & Krawchuk, 2009). Research has generally supported the relationship between collective motivation and performance in adults, and has also found that adult groups’ motivation beliefs develop through shared experiences and tend to stabilize over time (Kozlowski & Ilgen, 2006).

A concept central to collective motivation is group cohesion, or “the strength of the relationship linking the members to one another and to the group itself” (Forsyth, 1990, p. 10). It has taken an index of the level of group development, directly related to within-group

cooperation and to both the quality and quantity of group interaction (Greene, 1989; Shaw, 1976, 1981). Evans and Dion's (1991) meta-analysis of studies addressing the relationship between group cohesion and group performance found a significant positive relationship between the two variables, indicating that cohesive groups, on average, tend to be more productive than noncohesive groups.

Within the context of a classroom, it can be assumed that cohesion would be closely related to the evaluation of the learning environment (Clement, Dornyei, & Noels, 1994), and by extension, to lower communication apprehension and raise self-perceived communication competence (Brown, 1994; Clement, Dornyei, & Noels, 1994; Jiang, 2009).

Although group dynamics has considerable implications for education in general, for the obvious reason that most institutional teaching uses group work, most research on group work in the classroom still pertains to social psychology and the cognitive learning process (Bransford, Brown, & Cocking, 2000; Johnson & Johnson, 1995, 2003; King, 2002; Levine & Moreland, 1990; Mayer, 2008; Wittrock, 1990). The first perspective that shed light on classroom group dynamics originated in the classical sociological theory of Cooley (1958, as cited in Schmuck & Schmuck, 1975); it emphasizes the reciprocal influences between the informal aspects of a group (i.e., how group members relate to one another) and the formal requirements and goals of the group (i.e., official or specified tasks).

Changes in instructional technique have led to a dramatic increase in the use of small groups and thus group work is increasingly being used as an instructional strategy throughout academia (Adams & Slater, 2002; McKinney & Graham-Buxton, 1993; Payne & Monk-Turner, 2006; Warnemunde, 1986). Since the 1960's, the growth in use of group work has paralleled that of other active learning strategies that are characterized as collaborative or cooperative learning

strategies. Collaborative and cooperative learning strategies have been the focus of education scholars in regards to group work in the classroom.

Collaborative learning refers to a variety of instructional methods that “encourage students to work together as they apply course material to answer questions, solve problems, or create a project” (Colbeck et al., 2000, p. 60). Collaboration is a personal philosophy, not just a classroom technique (Johnson, Johnson, & Smith, 1991). In all situations where people come together in groups, it suggests a way of dealing with people that respects and highlights individual group members’ abilities and contributions. There is a sharing of authority and acceptance of responsibility among group members for the group’s actions. The underlying premise of collaborative learning is based upon consensus building, through cooperation, by group members in contrast to competition in which individuals best other group members (Bruffee, 1995; Panitz, 1996).

Cooperative learning differentiates from collaborative learning in that it is regarded as a “more structured, hence more focused, form of collaborative learning” (Millis & Cottell, 1998, p. 4). Cooperation is working together to accomplish shared goals (Johnson & Johnson, 1991). Cooperative learning, then, is defined by a set of processes which help people interact together in order to accomplish a specific goal or develop an end product that is usually content specific (Artz & Newman, 1990; Johnson, Johnson, & Holubec, 1986; Panitz, 1996). It is more directive than a collaborative system of governance and closely controlled by the instructor (Rockwood, 1995). While there are many mechanisms for group analysis and introspection, the cooperative learning approach is teacher-centered whereas collaborative learning is more student-centered.

In both collaborative learning and cooperative learning instructional strategies, group work is used; however, group work doesn’t necessarily involve cooperation (Woolfork, 2001).

Rather, group work simply means several students working together. In actuality, group work alone may be more beneficial than either collaborative or cooperative (Brown, 1994; Jiang, 2009). The environment provided by group work puts less emphasis on the product (the 'right' answer) and more on the process of getting an answer (Jiang, 2009) as opposed to collaborative learning or cooperative learning which, by definition, has a specific outcome in mind.

Researchers report that regardless of the subject matter students working in small groups – three to five members work best as larger groups decrease each member's opportunity to participate actively (Davis, 1993) – tend to learn more of what is taught and retain it longer than when the same content is presented in other instructional formats (Tiberius, 1990). Students working in groups are also more satisfied with their classes (Collier, 1980; Fiechtner & Davis, 1992; Kohn, 1986).

Johnson, Johnson, and Smith (1991) have posited that there are three general types of group work: study teams, formal learning groups, and informal learning groups. Study teams are long-term groups (usually existing over the length of the semester) consisting of three to five students (Davis, 1993). The purpose of a study team is to establish an environment of support, encouragement, and assistance in completing course requirements and assignments through the duration of the class (typically a semester) (Davis, 1993; Johnson, Johnson, & Holubec, 1998; Johnson, Johnson, & Smith, 1991). Study teams are valuable in large classes with complex subject matters.

Formal learning groups are established to complete a specific task, such as perform a lab experiment, write a report, carry out a project, or prepare an assignment (Davis, 1993). Formal learning groups range in length from one class period to several weeks or longer. The teacher can structure any academic assignment or course requirement for formal learning groups. Johnson,

Johnson, and Holubec (1998) indicate the importance of formal learning groups when they explain “formal learning groups ensure that students are actively involved in the intellectual work of organizing material, explaining it, summarizing it, and integrating it into existing conceptual structures” (p. 7).

Informal learning groups are ad hoc temporary groupings of three to five students within a single class session (Davis, 1993; Johnson, Johnson, & Holubec, 1998; Johnson, Johnson, & Smith, 1991). Informal groups can be initiated at any time, in a class of any size, to check on students’ understanding of the material, to give students an opportunity to apply what they are learning, or to provide a change of pace.

As study teams and formal learning groups most often take place in large classes or upper-division classes with difficult course material, this paper will focus only on the use of informal learning groups. Informal learning groups are more practical in a greater variation of courses across academia than study groups or formal learning groups. The goal of this paper is to generalize to a broader range of undergraduate classes in which it is more likely that informal learning groups will be, or are already being, used.

An operational definition of group work exemplifies a functional approach that maintains groups construct boundaries, socialize members, and engage in tasks (Christ, Beebe, & Barge, 1994). In this study, then, a group consists of three to four students established to complete a specific task within the classroom at the instructor’s direction. The size of the groups was determined by a 2006 (Lowry, Roberts, Romano, Cheney, & Hightower) study that evaluated the impact of varying group sizes. Results indicated that smaller groups established and maintained higher levels of communication. Additional research suggests that group size is negatively correlated to the generation of ideas and degree of cohesiveness (Lowry, Roberts, Romano,

Cheney, & Hightower, 2006; also see Steiner, 1972). Small groups naturally allow for increased opportunities for interaction (Christ, Beebe, & Barge, 1994; Lowry, Roberts, Romano, Cheney, & Hightower, 2006). Findings suggested 3-person groups were ideal (Lowry, Roberts, Romano, Cheney, & Hightower, 2006).

The intention of this definition is to aim for the highest level of active involvement in the learning process while still being given a form of direction for the assignment. Group interaction is characterized by the exchange of ideas, information, perspectives, attitudes, and opinions (Cohen, 1994). Recent research has shown that peer interaction within a group can guide and support high-quality thinking and discussion that is the outcome active learning aims for (King, 2002). Group work provides students with an opportunity to refine their participation skills in a more relaxed atmosphere and with greater levels of social support from their classmates. Studies show that student participation is positively related to perceptions of support and friendship (Deci, Ryan, & Williams, 1996; Frymeier, 2005; Johnson, Johnson, & Anderson, 1983; Myers & Bryant, 2002; Myers, Edwards, Wahl, & Martin, 2007). This positive relationship has also been found to apply to participation. Beebe and Masterson (1997) posit that group members' satisfaction with the group increases with participation. Levine and Moreland's (1990) review of the psychological literature presents evidence that members of a cohesive group are more likely than others to participate actively in discussion and willingly engage in classroom participation (also see Klassen & Krawchuk, 2009). This has also been found in the realm of communication studies (Beebe & Masterson, 1997). Group problem solving provides an opportunity for group members to participate; several research studies suggest that individuals in a group are more committed to participation so as to ensure a solution that they are pleased with. Students perceive

other students to be more encouraging and more caring and concerned in environments using group work; thus, communication apprehension is reduced.

Group work can provide a more comfortable and relaxing learning atmosphere (Brown, 1994; Jiang, 2009; Schmuck & Schmuck, 1975). Students have less communication apprehension when they are thinking and speaking without being watched by a class or the teacher (Jiang, 2009). It is even the “magic” (Brown, 1994, p. 174) of group work that some silent students suddenly become active participants. Researchers found that students developed greater self-perceived communication competence in participating in classrooms when group work was used (Hongmei, 2007; Jiang, 2009; Kinsella, 1993). An increase in the self-perceived competence leads to a greater willingness to communicate.

Jiang (2009) outlines three benefits for using group work as an instructional design to increase students’ participation – group work gives students a positive affective climate, group work increases students’ self-confidence and self-esteem, and group work promotes students’ social interaction – however, the primary gain is that group work establishes a positive climate by creating a relaxed and non-threatening atmosphere in the classroom. While some students are reticent in participating for fear of making a mistake or getting the wrong answer, the environment provided by group work is comfortable for most students, including the high apprehensives (Brown, 1994; Jiang, 2009). This article suggests group work reduces the factors that discourage willingness to communicate from apprehensive students; in addition to providing a constructive climate, the article observes an increase in students’ self-perceived communication competence with the use of group work (Jiang, 2009). Literature suggests that an increase in self-perceived competence in the classroom will lead to increased learner effort and a greater willingness to participate. This seems to answer, in part, the research question posited at the

beginning of this paper as this study attempts to examine what, if any, influence group work has on students' willingness to communicate, or participate. However, the article did not report the results of a study and is not formal research.

There is a significant body of literature in the social sciences investigating how people interact in various small group formations, such as groups engaged in problem-solving tasks or leadership teams making decisions. Although such an approach is clearly relevant to instructional contexts as well, except for the field of cooperative learning that has been extensively researched in the past, the amount of research conducted on group work as an instructional design is surprisingly limited (Cohen, 1994; Dornyei & Kormos, 2000; Schmuck & Schmuck, 1997).

Rationale for Hypotheses

Due to the seemingly interdependent relationship that exists between willingness to communicate, communication apprehension, and self-perceived competence, three hypotheses were generated for this study. Each hypothesis seeks to examine a particular variable's relationship to students' willingness to participate in class.

The first hypothesis is regarding willingness to communicate. WTC is the likeliness that an individual will choose to communicate in particular situations and with particular individuals. WTC is typically thought of as an individual trait, but research has shown it may also be influenced by situations and contexts. Individuals are more willing to communicate with friends than strangers. Scholars have noted that group work promotes an environment that reduces the factors that discourage WTC. Through the interaction with peers in group work students are able to get to know one another; it is this change of receivers and contexts through group work that it can be hypothesized:

H₁ – Group work will have a positive relationship with students’ willingness to communicate.

Communication apprehension is the degree of avoidance of participation resulting from expectations of judgment or negative outcomes. Group work creates an atmosphere that is more comfortable for students who are apprehensive about communicating, by establishing a climate where there is less judgment (particularly from instructors) and greater perceptions of encouragement (particularly from peers) (Brown, 1994; Jiang, 2009; Schmuck & Schmuck, 1975). Therefore, it can be posited that:

H₂ – Group work will decrease students’ communication apprehension.

Self-perceived competence is an individuals’ perception of their own ability to communicate. Confidence is gained through communication experience. This can be evidenced by significant increases in self-perceived competence over time (Berdine, 1986; Fritschner, 2000; Howard & Henney, 1998; Wade, 1994; Weaver & Qi, 2005). The function of group work is to provide students with opportunities to socialize (Christ, Beebe, & Barge, 1994) and small groups allow for increased interaction between all group members (Christ, Beebe, & Barge, 1994; Lowry, Roberts, Romano, Cheney, & Hightower, 2006). The opportunities to refine communication skills through interaction in a small group setting leads to the hypothesis that:

H₃ – Group work will increase students’ self-perceived competence.

CHAPTER 3 - Methodology

To test the previous hypothesis, an experimental research design was administered. This section will, first, look at the participants used in this research, how the survey was administered and the protocols used. Furthermore, the instrument and variables of the study will be clearly defined along with the results from the factor analysis. Finally, the procedure of data analysis will be discussed.

Sample

This study was conducted with students enrolled in the introductory public speaking course at a Midwestern university. Subjects for this study were enrolled in a basic public speaking course. Public speaking is a general education requirement and is most often taken within the students' Freshman or Sophomore year. It is a core requirement and is therefore considered to be fairly representative of the undergraduate student population we want to know more about: freshmen and sophomores. This thesis seeks to discover the effect of group work on classroom communication; this course was selected because general education classrooms provide a common milieu for understanding and appropriating results of classroom research projects and therefore provide a basis for generalization (Gump, 2007).

All sections of the basic public speaking courses were selected to participate in this study. Sections were then randomized to treatments – *group work* or *no group work*. Instructors were required to attend a thirty-minute meeting to brief them on the treatment protocols for which their sections had been randomly selected (Appendix A). At this time, instructors had the option to choose not to participate for any reason and without penalty. One instructor chose to opt out of the study due to time constraints.

The total number of pretest surveys administered was 483; however, student dropout and absence allowed for only 280 posttest surveys to be collected. Of the surveys received, 55 were dismissed due to error reading the Scantrons used to record students' answers. A final total of 225 surveys were used for this study; 120 student participants were assigned to the control protocol of *no group work* and 105 student participants were assigned to the treatment protocol of *group work*. The demographics of the participants were not recorded; this is discussed as a limitation of the study in Chapter five.

Procedure

This study ran during the first four weeks of the semester. The material covered during this time frame included the syllabus and the first four chapters of the text. The first four chapters present information that is foundational to the course and most often taught the same across the sections. A pretest survey was administered to students upon arrival to the first day of class, before students had the opportunity to interact with the instructor or peers. This was to diminish the chance for students to evaluate the instructor's personality, the learning environment, and the teaching methods that may have potentially affected students' willingness to participate. Students were informed that the survey being conducted was to examine students' willingness to participate during class; they were not, however, informed of the treatment their section would be receiving. Completing the survey was entirely voluntary and under no condition were students penalized for not taking the survey. Student participants created a Personal Identification Number (PIN) that they would use throughout the duration of the study. This guaranteed the anonymity of their answers as well as allowing for their scores to be tracked from pretest to posttest.

After the completion of the pretest survey, classes were taught using the assigned instructional protocol of group work or no group work. All sections participating in the study were given assignments corresponding to the first four chapters according to their treatment (Appendix B). The assignments were identical in context and only different in accordance with the treatment. Sections receiving the *group* treatment were randomly placed in informal learning groups for class activities and assignments. (It is noteworthy groups were unstructured, informal discussions having tasks but no substantial consequences for the participants.) In sections receiving the *no group* treatment, students completed all activities and assignments on their own and without interacting with others.

At the end of the study, a posttest (identical to the pretest) was administered to students. The participants' scores were compared to their initial scores in order to evaluate whether a difference exists. This is discussed in the results section.

Instrument

This study will apply Neer's (1987) Classroom Apprehension about Participation Scale (CAPS). Neer's (1987) study was founded on the PRCA, which indicated situational consistency of communication apprehension (McCroskey, 1982), an attribute of Willingness to Communication. Results of Neer's (1987) study demonstrated that the CAPS not only provides an assessment of students' predisposed WTC, as does the WTC scale (McCroskey & Baer, 1985) and students' levels of communication apprehension, as does the PRCA-24 (McCroskey, 1992), but goes a step further than the traditionally used WTC or the PRCA-24 by identifying several behaviors of potential difficulty for students to engage during discussion. The instrument also identifies several evaluative attitudes impacting upon classroom participation, including trait deficits contributing to nonparticipation. The CAPS (Appendix C) consists of twenty Likert-type

statements similar to those of the WTC and the PRCA-24 (Neers, 1987). For this study, the CAPS was nominally scored using a dichotomous scaling method measuring either *agree* or *disagree* to disallow students a neutral response.

Variables

The CAPS was constructed with two dimensions in mind: communication participation and self-perceived competence of communication (Neers, 1987). Communication participation is a branch of WTC as it measures predispositions to communicate; the difference is that this portion of the CAPS focuses on predispositions to communicate specifically in the classroom. The first dimension of the scale consists of ten items (see even-numbered scale items) that focus on approach-avoidance behaviors often associated with WTC. The second dimension of the CAPS, an offspring of the PRCA-24, consists of ten items (see odd-numbered scale items) designed to measure self-perceived competence of communication including both general nervousness and the fear of being evaluated by others during class participation. These items were designed to identify expectation outcomes that may play a role in deciding whether to participate (Neer, 1987).

Factor analysis was conducted with all 20 items of the CAPS using principal component analysis with Varimax (orthogonal) rotation. Principle component analysis was used because the primary purpose was to identify and compute composite scores for the factors underlying the CAPS.

First, several assumptions were tested. The determinant for the correlation matrix should be greater than .0001 (Leech, Barrett, & Morgan, 2008). For this set of items, the determinant was .003 so the correlation matrix was sufficiently stable for factor analysis. The Kaiser-Merger-Olsin (KMO) should be greater than .70 (Leech et al., 2008). This set of items had a KMO

measure of .913, indicating sufficient items for each factor. Finally, the Bartlett test should be significant (Leech et al., 2008). The test showed a chi-square of 3274.328 (df = 190, $p < .001$). Thus, we can conclude that the variables are correlated highly enough to provide a reasonable basis for factor analysis.

The analysis yielded three factors explaining a total of 46.97% of the variance for the entire set. Factors were determined by observing initial loadings of greater than .5 with secondary loadings less than .3 (see table 1). Factor 1 was labeled *willingness to communicate* due to the high loadings by the following items: looking forward to speaking in class; looking forward to participating in class; preference for listening; enjoyment of leadership roles; participating more than others. These items share the conceptual meaning of Willingness to Communicate as one's willingness to communicate, or not communicate, in particular situations and particular individuals. This first factor explained the majority, approximately 31%, of the variance. Cronbach's alpha was .79.

The second factor derived was labeled *communication apprehension*. This factor was labeled as such due to the high loadings by the following factors: speaking in class only if called upon; speaking only if the answer is known; speaking regardless of requirement; avoidance of speaking; nervousness about participation; not knowing how to answer an instructor's question. A theoretical concept of avoidance or fear of consequence associated with participation can be seen throughout these items. The variance explained by this factor was 10.23%. Cronbach's alpha was .76.

The third factor was labeled *self-perceived competence* due to the high loadings by the following items: afraid the instructor or peers won't understand; afraid of saying something wrong; difficulty organizing thoughts; hesitant to speak because others will do better. These

items reflect individuals' perceptions of their own ability to complete a communication task within the classroom. This factor explained just over 6% of the variance. Cronbach's alpha was .71.

Table 1: Factor loadings and communalities based on a principal component analysis with Varimax rotation for 20 items from the Classroom Apprehension about Participation Scale (CAPS) (N = 560)

	Loadings			<u>Communality</u>
	Factor 1: Willingness to Communicate	Factor 2: Communication Apprehension	Factor 3: Self-perceived Competence	
* I look forward to speaking in class	.759	.128	.112	.605
* I look forward to participating	.730	.159	.084	.565
I would rather listen	.671	.315	.064	.554
* I enjoy assuming leadership roles	.659	.032	.163	.462
* I will participate more than others	.629	.263	.025	.465
I won't speak in class unless called upon	.181	.669	.005	.481
I won't speak unless I know the answer	.334	.647	.000	.531
* I will speak even though it's not required	.443	.616	.009	.567
I will avoid speaking	.439	.582	.137	.551
I'm usually too tense or nervous to participate	.100	.512	.467	.490
If the instructor calls on me I won't know what to say	-.130	.505	.275	.348

I'm afraid the instructor/students won't understand what I'm saying	-.058	.064	.755	.577
I'm afraid I'll say something wrong	.051	.139	.714	.532
I have difficulty organizing my thoughts when I want to say something	.096	.075	.674	.469
I am hesitant to speak because other students will do better	.262	.115	.621	.468
I am hesitant about speaking unless a question is asked	.381	.209	.455	.396
I worry the instructor will call on me	.271	.407	.448	.440
I won't speak in class because I don't have much to say	.339	.429	.252	.363
I usually avoid enrolling in classes that require participation	.070	.399	.208	.207
If I have a question, I will wait until someone else asks it	.345	.397	.220	.325
% of Total Variance	30.83	10.233	5.911	
Total Proportion of Explained Variance			46.97%	

* Reverse coded

Statistical Analysis

The data was analyzed using SPSS. With the factor analyses finalized, the next chapter will focus on the results found, followed by discussion of the results and the explanation of the

relationship between the use of group work as an instructional strategy and students' willingness to participate in the classroom.

CHAPTER 4 - Analysis & Results

An analysis of variance (ANOVA) was performed, using the General Linear Model program in SPSS. It was conducted to assess whether the *Group/No Group* treatment produced differences between the pretest and posttest scores. The *Group/No Group* treatment comprised the between-group factor, while the pretest and posttest scores were analyzed as a repeated-measures factor. Alpha was set at .05.

The assumptions for repeated-measures ANOVA are virtually the same for between-groups ANOVA, including independence of observations, normality, and homogeneity of variances. Since the scores for one participant in the study were not dependent on the scores for another participant, we believe that the assumption for independence of observations was met. Normality was checked through an observation of the skewness scores on the dependent variables. Due to the fact that all of the scores were less than 1.0, we concluded that the assumption of normality was met (see Leech et al., 2008, p. 27). The assumption for homogeneity of variances was tested with the results.

Willingness to Communicate

The first hypothesis posited group work would have a positive relationship with WTC. The test for sphericity was not violated, so we can assume that the variances were homogeneous. The table for the means and standard deviations are shown below.

Table 2: Means and standard deviations for Variable 1 – *Willingness to Communicate*

	Pretest	Posttest
<i>Group</i> (N = 105)	M = 1.36 SD = .35	M = 1.43 SD = .32
<i>No Group</i> (N = 118)	M = 1.32 SD = .32	M = 1.35 SD = .36

Results indicated a significant main effect for the pretest-posttest scores ($F [1, 221] = 6.29, p = .013, \text{partial } \eta^2 = .028$), but not for the treatment ($F [1, 221] = 2.20, p = .14, \text{partial } \eta^2 = .01$). In addition, the interaction between the treatment and the pretest-posttest scores was not significant ($F [1, 221] = .928, p = .336, \text{partial } \eta^2 = .004$). This indicates that, regardless of the treatment, participants improved from the pretest to the posttest scores. Hypothesis 1 was not supported.

Communication Apprehension

The second hypothesis suggested group work would reduce communication apprehension. The test for sphericity was not violated, so we can again assume that the variances were homogeneous. The table of means and standard deviations are shown below.

Table 3: Means and standard deviations for Variable 2 – *Communication Apprehension*

	Pretest	Posttest
<i>Group</i> (N = 104)	M = 1.68 SD = .33	M = 1.74 SD = .29
<i>No Group</i> (N = 119)	M = 1.72 SD = .28	M = 1.72 SD = .28

Results indicated a significant main effect for the pretest-posttest scores ($F [1, 221] = 4.36, p = .04, \text{partial } \eta^2 = .02$), but not for the treatment ($F [1, 221] = .124, p = .725, \text{partial } \eta^2 = .001$). However, a significant interaction was observed between the treatment and the pretest-posttest scores ($F [1, 221] = 3.99, p = .047, \text{partial } \eta^2 = .018$). Because the effect is a disordinal interaction, only the interaction effect is interpretable. The results indicate that the *Group* experience improved posttest scores. As a result, hypothesis 2 was supported.

Self-perceived Competence

The third hypothesis suggested group work would increase self-perceived competence. The test for sphericity was not violated, so we can again assume that the variances were homogeneous. The table of means and standard deviations are shown below.

Table 4: Means and standard deviations for Variable – *Self-perceived Competence*

	Pretest	Posttest
<i>Group</i> (N = 105)	M = 1.68 SD = .32	M = 1.74 SD = .33
<i>No Group</i> (N = 120)	M = 1.65 SD = .36	M = 1.67 SD = .36

Results indicated a significant main effect for the pretest-posttest scores, ($F [1, 223] = 5.30, p = .022, \text{partial } \eta^2 = .023$), but not for the treatment ($F [1, 223] = 1.45, p = .23, \text{partial } \eta^2 = .006$). Additionally, the interaction between the treatment and the pretest-posttest score was not significant, $F (1, 223) = 2.10, p = .15, \text{partial } \eta^2 = .009$. This indicates that, regardless of the treatment, participants improved from the pretest to the posttest. Hypothesis 3 was not supported.

CHAPTER 5 - Discussion

The purpose of this study was to examine whether or not a relationship existed between the use of group work and student participation. This chapter will discuss the findings and their implications, the limitations of the study, and finally direction for future research

Discussion

This study created three hypotheses regarding the effects of group work and student participation. We will review each hypothesis and then discuss the results in relation to them.

Hypothesis 1

Our first hypothesis suggested that group work would have a positive relationship with students' willingness to communicate. Posttest scores showed an improvement in students in both the control group and the treatment group. This indicates that students became more willing to communicate over the four-week duration of the course regardless of the use of group work. Table 2 shows a greater improvement in participants receiving group work treatment, but not enough to be significant.

It is expected that students would be more willing to communicate as a course progresses. Research has shown how WTC can be affected by social contextual variables, MacIntyre et. al (2001) found that social support by families and friends was an important consideration in promoting WTC. This can be seen in the context of a classroom as well. Turner and Patrick (2004) noted that classroom environments often promote perceptions of support. It is probable that the change noted between pretest and posttest is due to time spent in the classroom, getting to know the instructor and classmates. Despite the fact this hypothesis was not significantly

supported, the increase between pretest and posttest scores reflects a need for additional study. A longitudinal study over the duration of a semester is likely to show a significant interaction between group work and willingness to communicate.

Hypothesis 2

The second hypothesis of this study was that group work would decrease communication apprehension. This was supported. Table 3 reflects no change in levels of communication apprehension by students receiving no group treatment and a significant change in students who did use group work. Results indicated that the use of group work resulted in lower levels of communication apprehension.

This outcome answers a question posited by Edwards and Walker (2007) in regards to the use of small groups in traditional classrooms and the effect on students' communication apprehension. A study done by Edwards and Walker (2007) reflected a decrease in students' communication apprehension when engaged in a public speaking/interdisciplinary learning community. Results indicated that students are more comfortable speaking in a class, such as public speaking, when they are in constant contact with their peers (Edwards & Walker, 2007). Communication apprehension most often results from feelings of being judged (Neer, 1987). When classmates get to know one another and develop relationships, they are more likely to feel supported and less likely to feel judged (Collier, 1980; Evans & Dion, 1991; Feichtner & Davis, 1992). Thus, their levels of communication apprehension are reduced because there is less expectation of negative consequences associated with the event of communicating.

It does not come as a surprise that hypothesis was supported. Results from several studies consistently revealed that students with higher levels of communication apprehension prefer

participating with students with whom they are acquainted, participating in small groups (c.f., Edwards & Walker, 2007).

Hypothesis 3

Hypothesis three suggested that group work would increase students' self-perceived competence. Table 3 reflects an increase in posttest scores from pretest scores regardless of treatment. Participants receiving group work did see a greater increase in self-perceived competence; however, the difference was not great enough to suggest significance.

These results support previous research regarding students' self-perceived competence when enrolled in a basic public speaking (Weitzel & King, 1980). Weitzel and King's (1980) study of the impact of basic communication courses on students' self-perceived competence indicated that the basic course material positively affected students' perceptions of their own ability in communication. That is, students felt significantly more competent about their communication abilities as a result of the course. While this study looked at units of students pre-course and post-course, it is likely that the type of course, when perceived as difficult, will result in low levels of self-perceived competence. Upon recognition that the course material may not be as complex as initially expected or upon developing an understanding of the material, self-perceived competence is increased (Weitzel & King, 1980).

While the effect of group work on self-perceived competence was not found to be significant in this study, it is probable that a longitudinal study would result in a greater effect. A study of Thai students reported students felt most competence when communication with acquaintances in a small group (Dilbeck, McCroskey, Richmond, & McCroskey, 2009). Conversely, students reported feeling less competent when communicating in a public speaking setting or talking with strangers. Because group work provides the opportunity to transform

strangers to acquaintances (Brown, 1994), it is likely that group work has a positive effect on students' self-perceived competence. However, confirmation of this relationship in future research is needed.

It is interesting that the results of hypotheses one and three indicated an increase in willingness to communicate and self-perceived competence regardless of receiving group work or no group work, while the results of hypothesis two showed a significant interaction between communication apprehension and the use of group work with no change from participants receiving no group work. It would seem as though all variables examined should show participants improving over time. It is practical to assume that the course type had an effect here (Weitzel & King, 1980). The basic public speaking course has been assessed in a variety of ways over many years and shown to result in a specific increase of self-perceived competence (Edwards & Walker, 2007; Weitzel & King, 1980). It is likely that students feel high levels of communication apprehension and low levels of self-perceived competence in relation to the tasks associated with a basic public speaking course. During the four-week length of this study, participants were introduced to the basic concepts that they would be using throughout the course. A deeper understanding of the concepts would allow for students to reevaluate their perceptions of task difficulty resulting in an increased level of self-perceived competence. Previous research has indicated that self-perceived communication competence is a strong predictor of willingness to communicate (Dilbeck, McCroskey, Richmond, & McCroskey, 2009). It's understandable, then, why hypotheses one and three saw an increase in participants' levels of willingness to communicate and self-perceived competence regardless of group work.

Still, it is interesting that communication apprehension levels only saw an increase in relation to the use of group work, but not without group work. Bandura (1988) notes that the

perception of low competence to perform a task can cause a person to be anxious while performing that task. It is most probable that students receiving group work treatment felt increased self-perceived competence due to the opportunities to practice their communication skills within a small group context; therefore resulting in less anxiety associated with participation.

Implications

The results of this study, though not entirely conclusive, provide great implications for practical adaptation of group work in the classroom. Group work is increasingly being used in classes across academia; however, traditional lecture-based instructional methods still dominate the classrooms. By showing the relationship between the use of group work and the

There is an important theoretical implication resulting from this study. First, the concept of group work provides a fruitful avenue of teaching and research to help our students actively participate in their own learning processes. The greatest strength of student participation is the resulting deeper level of learning that takes place. Theories that claim learning is a social construction of knowledge (King, 2002), such cognitive activities as participation force students to clarify concepts, elaborate on them, reorganize thinking, or reconceptualize the material. At a more complex level of learning that takes place in higher education, asking and answering thought-provoking questions forces students to actually think deeply about the material, integrating it with prior knowledge and constructing new knowledge (Cohen, 1991; Crone, 1997; King, 2002; Turner & Patrick, 2004). By reducing communication apprehension, group work allows for increased participation, as students feel more comfortable participating. Not only is group work potentially a gateway to participating, it may actually develop learning at a deeper level than the just that achieved through participation. When students are exposed to alternative

perceptions and conflicting views of group members, they are put in such a state of cognitive imbalance that they are motivated to continue the discussion (King, 2002). Interaction with peers through group work requires students to confront any differences in each other's current understanding of a topic as well as their differing attitudes or perspectives. Then, through explaining and defending their views to their group, those conflicts can be reconciled. In doing so, individuals reformulate their own thinking and alter their knowledge structures – that is, they learn. Without the interaction that takes place in a group, it is unlikely that students would be able to accomplish this process alone. Therefore, while participation itself has been shown to result in deeper learning it is theoretically possible that group work is the most effective and efficient vehicle to carry students to that peak.

Limitations and Future Research

The first limitation of this study is that it did not examine the demographic, social, and other traits that may impact participation. The Classroom Apprehension about Participation Scale (CAPS) (Neer, 1987) was the only instrument used in this study. While the reliabilities of the three variables included in the CAPS were considered to be sound (variable 1: $\alpha = .79$; variable 2: $\alpha = .74$; variable 3: $\alpha = .71$), the instrument left no room for consideration of possible extraneous variables including participant demographics or traits. Possible variables include a wide variety of readily detectable demographics that are likely to impact social relationships within the group such as gender, age, and ethnicity (Bowers, Pharmer, & Salas, 2000, Jackson, May, & Whitney, 1995). Conversely, underlying attributes include individual traits such as knowledge, skills, cultural background, or personality (Jackson, May, & Whitney, 1995). Studies have examined group diversity from less “observable” perspectives. Traits or attributes that have been studied include self-image, social identity, personality, and emotional

intelligence (Bowers, Pharmer, & Salas, 2000). It is apparent that a wide range of variables can significantly influence group function.

A second limitation to this study is the method of scoring. In order to prevent students from being classified as a *neutral* participant, the original 5-point Likert scale of the CAPS was reduced to a dichotomous Likert scale of *agree* or *disagree*. Most researchers would not use a Likert scale with items of less than five categories: the fewer the number of points, the more likely the departure from the assumption of normality (Garson, 2009). In a recent review of literature on this topic, Jaccard and Wan (1996) summarize, “for many statistical tests, rather severe departures (from intervalness) do not seem to affect Type I or Type II errors” (p. 4). In regards to the potential limitation that the dichotomous scoring may have had on the results of this study, we can conclude that, because the assumption of normality was met (all scores were less than 1.0, see Leech, Barrett, & Morgan, 2008, p. 27) the likelihood that the effect was dramatic is minimal. However, it is the case the greater significance may have been shown using an ordinal 5-point Likert scale.

A third limitation that appears to be the most problematic is the fact that this study spanned only a four-week duration of time during which the sections involved in the study met only twice a week for fifty-minute class periods. A review of literature suggests that frequent interaction between classmates may ease communication apprehension (Neer & Kircher, 1989). If sections allowed for additional time to dedicate to discussion within the small groups, it is a possibility that the results may have seen greater significance.

Finally, an implication can be drawn regarding communication apprehension. A 1990 study by Rubin, Graham, and Mignerey, posited that students’ communication apprehension is significantly reduced over four years of college. Brown (1994) suggests that this is due to

classroom interaction turning classmates from strangers to acquaintances. This is additionally supported by Neer and Kircher (1989) whose findings indicate that students with high levels of communication apprehension are more likely to participate as they got to know their classmates. This study did find that communication apprehension was positively related to the use of group work in the classroom (see Table 3) and as Brown (1994) and Jiang (2009) indicated, research has found that students developed greater self-perceived competence in classrooms where group work was used as an instructional strategy. An increase in self-perceived competence additionally leads to a greater willingness to communicate (Brown, 1994; Hongmei, 2007; Jiang, 2009; Kinsella, 1993). Thus, it seems likely that had this study been a longitudinal study, perhaps spanning the duration of a semester, the interaction effect between the treatment and variables 1 (willingness to communicate) and 3 (self-perceived competence) would have shown significance as well.

To better inform and improve classroom teaching and learning, now more than ever before, educational researchers need to effectively and efficiently describe essential components of positive learning environments. Based on these limitations and implications, it appears there is much room for continued research. The first order of study ought to find support for hypotheses 1 and 3; therefore, a future study will need to accomplish three specific goals: 1) Utilize an instrument that can account for possible extraneous variables including demographics and traits; 2) Employ a longitudinal study to observe the interaction effect between communication apprehension, self-perceived communication competence, and willingness to communicate; 3) Maintain use of an ordinal Likert scale in order to more fully understand the participants' willingness to communicate. Subsequent to more wholly comprehending the level of relationship between the use of group work and students' willingness to participate in the classroom, future

studies should seek to answer three questions. What situations within the dynamics of the group (i.e., role assignment, homogeneity/heterogeneity) have an effect (and what kind of effect) on students' communication apprehension? Is apprehension about classroom communication able to be manipulated as 1) a situation or 2) a trait? What other strategies can instructors adapt to encourage classroom participation?

Overall, this study resulted in partial success regarding the use of group work as an instructional strategy for promoting student participation. A larger database is necessary before any generalization may be made. Although the results were less than crystalline, the goal of this exploratory research endeavor has been accomplished. There now is at least a starting point for investigators to extend research into the numerous variables related to student participation, particularly concerning communication apprehension. The literature does not question the necessity of student participation in the classroom; however, solid, data-based research must be found to aid in improving teaching methods that will encourage and promote student participation. Student participation provides students with opportunities to actively take part in their own learning process, promoting deeper learning that enables students to understand the material, retain the information, and apply it to their own daily lives (Beekes, 2006; Johnston, James, Lye, & McDonald, 2000). As overall student participation has become increasingly important in the college classroom (Rocca, 2010) it is essential to find methods for instructors to increase student participation and, in turn, heighten the level of learning by college students.

References

- Adams, J., & Slater, T. (2002). Learning through Sharing: Supplementing the Astronomy Lecture with Collaborative-Learning Group Activities. *Journal of College Science Teaching*, 31 (6), 384-387.
- Alicesteen, R., & Peterson, L. (2007). Comparison of planning a speech to planning a party.
- Allred, C. R., & Swenson, M. J. (2006). Using technology to increase student preparation for and participation in marketing courses: The random selector model. *Marketing Education Review*, 16, 15-21.
- Arbaugh, J. B. (2000). The virtual classroom versus physical classroom: An exploratory study of class discussion patterns and student learning in an asynchronous Internet-based MBA course. *Journal of Management Education*, 24 (2), 213-233.
- Artzt, A.F., Newman, C.M., (1990). How To Use Cooperative learning in the Mathematics Class, National Council of Teachers of mathematics: Reston, VA.
- Baker, S. C., & MacIntyre, P. D. (2000). The effects of gender and immersion on communication and second language orientations. *Language Learning*, 50, 311-347.
- Beebe, S. A., & Masterson, J. T. (1997). *Communicating in small groups; Principles & practices* (5th ed.). Addison-Wesley Educational Publishers Inc.
- Beekes, W. (2006). The 'Millionaire' method for encouraging participation. *Active Learning in Higher Education*, 7, 25-35.
- Berdine, R. (1986). Why some students fail to participate in class. *Marketing News*, 20, 23-24.
- Bok, D. (2006). *Our underachieving colleges: A Candid look at how much students learn and why they should be learning more*. Princeton: Princeton University Press.

- Booth-Butterfield, S. (1988). Instructional interventions for reducing situational anxiety and avoidance. *Communication Education, 37*, 214-223.
- Bowers, C. A., Pharmer, J. A., & Salas, E. (2000). When member homogeneity is needed in work teams: A meta-analysis. *Small Group Research, 31* (3), 305-327.
- Bowers, J. W. (1986). Classroom communication apprehension: A survey. *Communication Education, 35*, 372-378.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn: brain, mind, experience, and school*. Washington DC: National Academy Press.
- Brown, H. D. (1994). *Teaching by principles: An Interactive approach to language pedagogy*. Englewood Cliffs, NJ: Prentice Hall.
- Bruffee, K. A. (1995). Sharing our toys: Cooperative learning versus collaborative learning. *Change, 27* (1), 12-18.
- Bump, J. (1990, February-April). Radical changes in class discussion using networked computers. *Computers and the Humanities, 21*, 49-65.
- Burchfield, C. M., & Sappington, J. (1999). Participating in classroom discussion. *Teaching of Psychology, 26*, 290-291.
- Campbell, J. & Mayer, R. E. (2009). Questioning as an instructional method: Does it affect learning from lectures? *Applied Cognitive Psychology, 23*, 747-759.
- Chan, B., & McCroskey, J. C. (1987). The WTC scale as a predictor of classroom participation. *Communication Research Reports, 4* (2), 47-50.
- Cherry, C. (2009). Plagiarism worksheet.

- Chesebro, J. W., McCroskey, J. C., Atwater, D. F., Behernfuss, R. M., Cawalti, G., Gaudino, J. L., & Hodges, H. (1992). Communication apprehension and self-perceived communication competence of at-risk students. *Communication Education, 41*, 345-360.
- Christ, W., Beebe, S., & Barge, J. (1994). *Chapter 12: Small Group Communication*, (p. 257-290) *Assessing Communication Education: A Handbook for Media, Speech & Theatre Educators*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ciani, K. D., Summers, J. J., Easter, M. A., Sheldon, K. M. (2008). *Educational Psychology, 28* (6), 627
- Clark, A. J., & Yeager, J. (1995). WTC and PRCA scores as indices of classroom communication participation in a high school setting. *The Florida Communication Journal, XXIII* (1 & 2), 16-23.
- Clement, R., Dornyei, Z., & Noels, K. A. (1994). Motivation, self-confidence, and group cohesion in the foreign language classroom. *Language Learning, 44* (3), 417-448.
- Cohen, E.G. (1994). Restructuring the classroom: Conditions for positive small groups. *Review of Educational Research, 64*, 1-35.
- Cohen, M. (1991). Making class participation a reality. *PS: Political Science & Politics, 24*, 699-703.
- Collier, K. G. (1980). Peer-group learning in higher education: The development of higher-order skills. *Studies in Higher Education, 5* (1), 55-62.
- Combs, M. J. (1990). Willingness to communicate: An investigation of instrument applicability to authority target types. M.A. Thesis, Ball State University, Muncie, IN.
- Crone, J. A. (1997). Using panel debates to increase student involvement in the introductory sociology class. *Teaching Sociology, 25*, 214-218.

- Cunconan, T. M. (2002). The Communicative Role of a Student: Conceptualizing: Measuring, and Validating a Student's Propensity to Ask Questions in the College Classroom. *Speech and Theatre Association of Missouri Journal*, 32, 1-22.
- Dallimore, E. J., Hertenstein, J. H., & Platt, M. B. (2004). Classroom participation and discussion effectiveness: Student-generated strategies. *Communication Education*, 53, 103-115.
- Dallimore, E. J., Hertenstein, J. H., & Platt, M. B. (2006). Nonvoluntary class participation in graduate discussion courses: Effects of grading and cold calling. *Journal of Management Education*, 30 (2), 354-377.
- Darling, A. L. (1989). Signaling non-comprehension in the classroom: Toward a descriptive typology. *Communication Education*, 38, 34-40.
- Davis, B. G. (1993). *Tools for teaching*. San Francisco: Jossey-Bass.
- Daly, J. A. (1977). Communication apprehension in the classroom. *FSC Journal*, 5 (1), 9-20.
- Daly, J. A., & Korinek, J. T. (1980). Instructional communication theory and research: An overview of classroom interaction. *Communication Yearbook*, 4, 515-532.
- Dancer, D., & Kamvounias, P. (2005). Student involvement in assessment: A project designed to assess class participation fairly and reliably. *Assessment & Evaluation in Higher Education*, 30, 445-454.
- Deci, E. L., Ryan, R. M., & Williams, G. C. (1996). Need satisfaction and the self-regulation of learning. *Learning and Individual Differences*, 8 (3), 165-183.
- De Vita, G. (2000). Inclusive approaches to effective communication and active participation in the multicultural classroom: An international business management context. *Active Learning in Higher Education*, 1, 168-180.

- Dilbeck, K. E., McCroskey, J. C., Richmond, V. P., & McCroskey, L. L. (2009). Self-perceived communication competence in the Thai culture. *Journal of Intercultural Communication Research, 38* (1), 1-7.
- Dion, K. L. (2000). Group cohesion: From “field of forces” to multidimensional construct. *Group Dynamics: Theory, Research, and Practice, 4*, 7-26.
- Donovan, L. A., & MacIntyre, P. D. (2004). Age and sex differences in Willingness to Communicate, Communication Apprehension, and Self-Perceived Competence. *Communication Research Reports, 21* (4), p. 420-427.
- Dornyei, Z., & Kormos, J. (2000). The role of individual and social variables in oral task performance. *Language Teaching Research, 4*, 275-300.
- Evans, C. R., & Dion, K. L. (1991). Group cohesion and performance: A meta-analysis. *Small Group Research, 22*, 175-186.
- Edwards, C., & Walker, S. (2007). Using public speaking learning communities to reduce communication apprehension. *Texas Speech Communication Journal, 32* (1), 65-71.
- Fassinger, P. A. (1995a). Professors’ and students’ perceptions of why students participate in class. *Teaching Sociology, 24*, 25-33.
- Fassinger, P. A. (1995b). Understanding classroom interaction. *The Journal of Higher Education, 66*, 82-96.
- Fiechtner, S. B., & Davis, E. A. (1992). Why some groups fail: A survey of students’ experiences with learning groups. In A. Goodsell, M. Maher, V. Tinto, and Associates (Eds.), *Collaborative learning: A Sourcebook for higher education*. University Park: National Center on Postsecondary Teaching, Learning, and Assessment, Pennsylvania State University.

- Forsyth, D. R. (1990). *Group dynamics* (2nd ed.). Pacific Grove, CA: Brooks/Cole.
- Fritschner, L. M. (2000). Inside the undergraduate college classroom: Faculty and students differ on the meaning on student participation. *The Journal of Higher Education*, 71, 342-362.
- Frymeier, A. B. (2005). Students' classroom communication effectiveness. *Communication Quarterly*, 53 (2), 197-212.
- Gallupe, R. B., Cooper, W., & Gris , M.L. (1994). Blocking electronic brainstorm. *Journal of Applied Psychology*, 79 (1), 77-86.
- Garside, C. (1996). Look who's talking: A comparison of lecture and group discussion teaching strategies in developing critical thinking skills. *Communication Education*, 45, 212-227.
- Garson, G. D. (2009). *Data levels and measurement*. Retrieved from Lecture Notes Online website: <http://faculty.chass.ncsu.edu/garson/PA765/datalevl.htm>.
- Gleason, M. (1986). Better communication in large classes. *College Teaching*, 34, 20-24.
- Greene, C. N. (1989). Cohesion and productivity in work groups. *Small Group Behavior*, 20, 70-86.
- Gump, S. E. (2007). Classroom research in a general education course: Exploring implications through an investigation of the sophomore slump. *The Journal of General Education*, 56, (2), 105-125.
- Harlow, M. (2009). Narration worksheet.
- Handelsman, M. M., Briggs, W. L., Sullivan, N., & Towler, A. (2005). A measure of college student course engagement. *The Journal of Educational Research*, 98, 184-191.
- Hendry, G. D., Heinrich, P., Lyon, P. M., Barratt, A. L., Simpson, J. M., Hyde, S. J., Gonsalkorale, S., Hyde, M., & Mgaith, S. (2005). Helping students understand their

- learning styles: Effects on study self-efficacy, preference for group work, and group climate. *Educational Psychology*, 25 (4), 395-407.
- Hongmei, X. (2007). A study on group work in college English collaborative teaching. *Sino-US English Teaching*, 4 (2), 1-7.
- Howard, J. R., & Henney, A. L. (1998). Student participation and instructor gender in the mixed-age college classroom. *The Journal of Higher Education*, 69, 384-405.
- Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. New York: Vintage.
- Jaccard, J., & Wan, C. K. (1996). *LISREL approaches to interaction effects in multiple regression*. Thousand Oaks, CA: Sage Publications.
- Jackson, S. E., May, K. E., & Whitney, K. (1995). Understanding the dynamics of diversity in decision-making teams. In R. A. Guzzo & E. Salas (Eds.), *Team effectiveness and decision making in organizations* (p. 204-261). San Francisco, CA: Jossey-Bass.
- Jiang, Y. (2009). Applying group work to improve college students' oral English. *International Education Studies*, 2 (3), 136-139.
- Johnson, D. W., & Johnson, R. T. (1991). The effects of different levels of positive interdependence in cooperative learning groups on achievement. Manuscript submitted for publication.
- Johnson, D. W., & Johnson, R. T. (1995). Social interdependence: Cooperative learning in education. In B. B. Bunker & J. Z. Rubin (Eds.), *Conflict, cooperation, and justice: Essays inspired by the works of Morton Deutsch* (p. 205-251). San Francisco, CA: Jossey-Bass.

- Johnson, D.W., & Johnson, R. T. (2003). Student motivation in cooperative groups: Social interdependence theory. In R. M. Gillies & A. F. Ashman (Eds.), *Cooperative learning: The social and intellectual outcomes of learning in groups* (pp. 136-176). New York: RoutledgeFalmer. Association for Supervisions and Curriculum Development.
- Johnson, D. W., Johnson, R. T., Anderson, D. (1986). Social interdependence and classroom climate. *Journal of Psychology, 114*, 135-142.
- Johnson, D. W., Johnson, R. T., & Holubec, E. J. (1986). *Circles of learning: Cooperation in the classroom*. Edina, MN: Interaction Book Company.
- Johnston, C. G., James, R. H., Lye, J. N., McDonald, I. M. (2000). An evaluation of collaborative problem solving for learning economics. *Journal of Economic Education, 31* (1), 13-29.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (1991). *Cooperative learning: Increasing college faculty instructional productivity*. ASHE-FRIC Higher Education Report No.4. Washington, DC: School of Education and Human Development, George Washington University.
- Karp, D. A., & Yoels, W. C. (1976). The college classroom: Some observations on the meanings of student participation. *Sociology and Social Research, 60*, 421-439.
- Kendrick, W. L., & Darling, A. L. (1990). Problems of Understanding in Classrooms: Students' Use of Clarifying Tactics. *Communication Education, 39* (1), 15-29.
- King, A. (2002). Structuring peer interaction to promote high-level cognitive processing. *Theory into practice, 41* (V), 33-39.
- Kinsella, K. (1993). Designing group work that supports and enhances diverse classroom work styles. *TESOL Journal, 6* (1), 22-27.

- Klassen, R. M., & Krawchuk, L. L. (2009). Collective motivation beliefs of early adolescents working in small groups. *Journal of School Psychology, 47*, 101-120.
- Kohn, A. (1986). *No Contest: The Case Against Competition*. Boston: Houghton Mifflin.
- Kozlowski, S. W. J., & Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and teams. *Psychological Science in the Public Interest, 7*, 77-124.
- Kuh, G. D., & Umbach, P. D. (2004). College and character: Insights from the National Survey of Student Engagement. *New Directions for Institutional Research, 122*, 37-54.
- Lee, C., & Farh, J. L. (2004). Joint effects of group efficacy and gender diversity on group cohesion and performance. *Applied Psychology: An International review, 53*, 136-154.
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2008). *SPSS for intermediate statuses: Use and interpretation* (3rd ed.) Mahwah, NJ: Lawrence Erlbaum Associates.
- Levine, J. M., & Moreland, R. L. (1990). Progress in small group research. *Annual Review of Psychology, 41*, 585-634.
- Lower, P. B., Roberts, T. L., Romano, N. C., Cheney, P. D., & Hightower, R. T. (2006). The impact of group size and social presence on small-group communication: Does computer-mediated communication make a difference? *Small Group Research, 37*, 631-661.
- Lyons, P. R. (1987). *Participation performance and behavioral expectations*. ERIC Document Reproduction Service. Washington, DC: Author.
- Lyons, P. R. (1989). Assessing classroom participation. *College Teaching, 37*, 36-38.
- MacIntyre, P. D. (1994). Variables underlying willingness to communicate: A causal analysis. *Communication Research Reports, 12*, 241-247.

- MacIntyre, P. D., Baker, S. C., Clement, R., & Donovan, L. A. (2002). Sex and age effects on willingness to communicate and intensive language programs. *Language Learning, 52*, 537-564.
- MacIntyre, P. D., Clement, R., Dornyei, Z., & Noels, K. A., (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *Modern Language Journal, 82* (4), 545-562.
- MacIntyre, P. D., & Charos, C. (1996). Personality, attitudes, and affect as predictors of second language communications. *Journal of Language and Social Psychology, 15*, 3-26.
- Mayer, R. E. (2008). *Learning and Instruction*, (2nd ed.) Upper Saddle River, NJ: Merrill Prentice Hall Pearson.
- McCroskey, J. C. (1992). Reliability and validity of the willingness to communicate scale. *Communication Quarterly, 40*, 16-25.
- McCroskey, J. C., & Baer, J. E. (1985). Willingness to communicate: The construct and its measurement. Paper presented at the SCA Convention, Denver, CO.
- McCroskey, J. C., & McCroskey, L. (1988). Self-report as an approach to measuring communication competence. *Communication Research Reports, 5*, 106-113.
- McCroskey, J. C., & McVetta, R. W. (1978). Classroom seating arrangements: instructional communication theory versus student preferences. *Communication Education, 27*, 99-111.
- McCroskey, J. C., & Richmond, V. P. (1990). Willingness to communicate: A cognitive view. *Journal of Social Behavior and Personality, 5*, 19-30.

- McDougall, W. (1920). *The group mind: A sketch of the principles of collective psychology with some attempt to apply them to the interpretation of national life and character*.
Cambridge, UK: Cambridge Press.
- McKinney, K., & Graham-Buxton, M. (1993). The use of collaborative learning groups in the large class: Is it possible? *Teaching Sociology*, 21 (4), 403-408.
- Michaelsen, L., Knight, A., & Fink, L. D. (2002). *Team-based learning: A Transformative use of small groups*. Westport, CT: Praeger
- Millis, B.J. & Cottell, Jr., P.G. (1998). *Cooperative learning for higher education faculty*.
Phoenix, AZ: Oryx Press.
- Myers, S. A. (1998b). Students' self-disclosure in the classroom. *Psychological Reports*, 83 (1), 1067-1070.
- Myers, S. A., Bryant, L. E. (2002). Perceived understanding, interaction involvement, and college student outcomes. *Communication Education*, 19 (2), 146.
- Myers, S. A., Edwards, C., Wahl, S. T., Martin, M. M. (2007). The relationship between perceived instructor aggressive communication and college student involvement. *Communication Education*, 56 (4), 495-508.
- Myers, S. A., & Knox, R. L. (2001). The Relationship between College Student Information-Seeking Behaviors and Perceived Instructor Verbal Behaviors. *Communication Education*, 50 (4), 343-356.
- Neer, M. R. (1987). The development of an instrument to measure classroom apprehension. *Communication Education*, 36, 134-143.
- Neer, M. R., & Kircher, W. F. (1989). Apprehensives' perception of classroom factors influencing their class participation. *Communication Research Reports*, 6 (1), 70-77.

- Nyquist, J. D., & Wulff, D. H. (1990). Selected active learning strategies. In J. A. Daly, G. W. Friedrich, & A. L. Vangelisti (Eds.), *Teaching communication: Theory, research, and methods* (337-262). Hillsdale, NJ: Erlbaum.
- Panitz, T. (1996). A Definition of Collaborative vs Cooperative Learning. Retrieved October 14, 2009 from: <http://www.lgu.ac.uk/deliberations/collab.learning/panitz2.html>.
- Payne, B. K., & Monk-Turner, E. (2006). Students' Perceptions of Group Projects: The Role of Race, Age, and Slacking. *College Student Journal*, 40 (1).
- Petress, K. (2006). An operational definition of class participation. *College Student Journal*, 40, 821-823.
- Richmond, V. P., & Roach, K. D. (1992). Willingness to communicate and employee success in U.S. organizations. *Journal of Applied Communication Research*, 20, 95-115.
- Rocca, K. A. (2009). Participation in the college classroom: The impact of instructor immediacy and verbal aggression. *Journal of Classroom Interaction*, 43, 22-33.
- Rocca, K. A. (2010). Student participation in the college classroom: An extended multidisciplinary literature review. *Communication Education*, 59 (2), 185-213.
- Rockwood, R. (1995). Cooperative and collaborative learning. *National Teaching and Learning Forum*, 4 (6), part I.
- Rosenfeld, L. B., Grant, C. H., & McCroskey, J. C. (1995). Communication apprehension and self-perceived communication competence of academically gifted students. *Communication Education*, 44, 79-86.
- Rubin, R. B., & Graham, E. E. (1988). Communication correlates of college success: An exploratory investigation. *Communication Education*, 37, 14-27.

- Rubin, R. B., Graham, E. E., & Mignerey, J. T. (1990). A longitudinal study of college students' communication competence. *Communication Education, 39*, 1-14.
- Rubin, R. B., Rubin, A. M., & Jordan, F. F. (1997). Effects of instruction on communication apprehension and communication competence. *Communication Education, 46*, 104-114.
- Schmuck, R. A., & Schmuck, P. A. (1997). *Group processes in the classroom*. Boston, MA: McGraw Hill.
- Scott-Phillips, T. (2010). The evolution of communication: Humans may be exceptional. *Interaction Studies, 11*(1), 78-99.
- Shaw, M. E. (1976). *Group dynamics: The psychology of small group behavior*. New York: McGraw-Hill.
- Steiner, I. (1972). *Group process and productivity*. New York: Academic Press.
- Tiberius, R. G. (1990). *Small group teaching: A Trouble-shooting guide*. Toronto: Ontario Institute for Studies in Education Press.
- Turner, J. C., & Patrick, H. (2004). Motivational influences on student participation in classroom learning activities. *Teachers College Record, 106* (9), 1759-1785.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wade, R. (1994). Teacher education students' views on class discussion: Implications for fostering critical reflection. *Teaching and Teacher Education, 10*, 231-243.
- Warnemunde, D. (1986). The name assigned to the document by the author. This field may also contain sub-titles, series names, and report numbers. The Status of the Introductory Small Group Communication Course. *Communication Education, 35* (4), 389-396.

- Weitzel, A. R., & King, S. W. (1980). The impact of a basic speech communication course on students' self-perceived task competence and perceived task difficulty: A case study. *Florida Speech Communication Journal*, 8 (2), 21-27.
- Wilcox, B. (1994). Involve everyone in class discussions. *Learning*, 22, 72-72.
- Wittrock, M. C. (1990). Generative processes of comprehension. *Educational Psychologist*, 24, 354-376.
- Woolfolk, A. (2001). *Motivation: issues and explanations*. In Educational Psychology (8th ed.; 365-394). Needham Heights, MA: Pearson Education Company.
- Wulff, D. H., & Nyquist, J. D. (1999). Selected tools and methods to engage students in learning. In J. A. Daly, G. W. Friedrich, & A. L. Vangelisti (Eds.), *Teaching communication: Theory, research, and methods* (2nd ed.; 279-291). Hillsdale, NJ: Erlbaum.
- Zakahi, W. R., & McCroskey, J. C. (1989). Willingness to communicate: A potential confounding variable in communication research. *Communication Reports*, 2 (2), 94-104.

Appendix A - Protocol

Group Work

Students will be placed in groups of 3-4 students to complete any and all assignments and activities during class time. Rosters will be randomized before each class period to ensure students do not work with the same classmates they have worked with on previous assignments and activities.

No Group Work

All assignments and activities will be completed individually and without assistance from classmates.

Appendix B - Treatment Protocols

Group Work

Class Period 1 – Orientation (Syllabus)

Purpose: This activity is designed as an icebreaker to introduce students to one another.

Time Allotment: Fifteen minutes total at the end of class; 5 minutes for groups to get to know one another, 10 minutes for class introductions.

Materials Needed: None.

Procedure:

1. Write the following bullet points on the board:
 - Name
 - Hometown
 - Class/Major
 - Fun Fact
2. Divide students into groups.
3. Instruct student to introduce themselves to one another, discussing the bullet points written on the board.
4. Have each group take time to introduce another member of their group to the class answering the bullet points they discussed.
 - Example: “Hi! This is my new friend, Janey Smith. She grew up in a suburb of Kansas City, Kansas. She’s a junior in Animal Science. And a fun fact about her is that she has a pet porcupine named Hiccup.”

Class Period 2- Decision Making and Decision Factors (Chapters 1 & 2)

Purpose: This activity is designed to help students remember the differences between the three concepts covered in this class period: decision factors, global decisions, and local decisions.

Time Allotment: Fifteen minutes total at the end of class; 5 minutes for groups to think and write their answers, 10 minutes for class discussion. Groups should turn in their answers at the end of class to ensure each student completed the assignment. Allot 1 point for completing this assignment.

Materials Needed: None.

Procedure:

1. Divide students into groups. Number each group from 1-5. Assign groups a party to plan that corresponds to their number.
 1. Mom or Dad's 50th birthday party
 2. Graduation party for a high school student
 3. Bridal shower for a 20 year female
 4. Grandparent's 50th wedding anniversary
 5. Moving away party for a college student
2. Have groups plan a party based on the following (be sure to have them write their answers on a piece of notebook paper with their names on it):
 - Decision Factors
 - What kind of party to have
 - Assignment/Context
 - Where to have the party
 - Physical Location

- How many people to invite and whom
 - Audience Background
- How much money to spend
 - Resources
- Global Decisions
 - Theme for the party
 - Topic
 - Guest of Honor
 - Thesis
 - Purpose of the party
 - Audience Outcome Goal
 - Activities to plan
 - Main Points
- Local Decisions
 - How to greet your guests
 - Introduction
 - What to wear
 - Delivery
 - Decorations
 - Support Materials
 - Gifts and party favors
 - Conclusion

3. Walk around the classroom checking on students' work, ensuring that they're staying on task, and answering any questions they might have.
4. When students have used the time allotted for planning their assigned party, host a discussion about groups' answers. You can equate a number of things to make this a successful activity. Ask your students to brainstorm other comparisons of feature between planning a party and planning a speech.

Class Period 3 – Global and Local Decisions (Chapter 3)

Purpose: This activity is designed to get students thinking deeper about plagiarism.

Time Allotment: Fifteen minutes total at the end of class; 5 minutes for groups to think and write their answers, 10 minutes for class discussion. Groups should turn in their answers at the end of class to ensure each student completed the assignment, along with their completed Activity 3.5 from their textbooks. Allot 2 points for correctly completing this assignment.

Materials Needed:

1. Activity 3.5 from the *Creating Speeches* textbook.
2. Plagiarism Worksheet

Procedure:

1. Divide students into groups.
2. Instruct groups to complete Activity 3.5 from their *Creating Speeches* textbook as well as the Plagiarism Worksheet. They may not finish in the allotted time, but they should at least try.
3. Walk around the classroom checking on students' work, ensuring that they're staying on task, and answering any questions they might have.

4. Discuss the answers as a class. Ask each group to present their answer to one of the questions from the textbook or the worksheet. Have them explain why they chose that answer; ask the rest of the class if they agree or disagree. Feel free to play “devil’s advocate” to encourage discussion.

Plagiarism Worksheet

Names: _____

1. You and your roommate are both taking Introduction to Public Speaking this semester, but are in different classes. You have prepared your Comparison Speech outline and turned it into your teacher, early, to be reviewed. Your roommate, however, has procrastinated on preparing his or her speech. The night before the outline is due, your roommate is panicking. You take pity on him or her and offer your roommate the articles and books that you used for research on your speech and you discuss the three main points you used in your speech. You tell your roommate that he or she must do the rest of the work.

Is this plagiarism?

Why or why not?

2. You find a speech online about health care reform. You like the organization of the speech, but think you could do better. You decide to re-do the speech, deleting most of it and just keeping the organization and the few good points that the speaker made. You add your own research and several of your own main points.

Is this plagiarism?

Why or why not?

3. You have decided to do your final speech on the life and works of your favorite architect. You have been studying this architect since high school, and have used him for several different

papers and presentations. While writing your speech, you simply expand a smaller presentation you gave over a year ago. You also use a short video that you created in high school as your attention getter.

Is this plagiarism?

Why or why not?

4. Your public speaking teacher has assigned a group project that is due the next class period. You and your group members divide up the work in equal parts, and agree to put it all together before class. You all meet that morning and during the meeting you realize that one of the group members has copied and pasted some of her material from Wikipedia. Class starts in ten minutes and you are afraid if you leave out her part of the speech you will lose points. You make sure that Wikipedia is on the works cited page and hope for the best.

Can you be accused of plagiarism?

Why or why not?

5. You are giving a speech about the history of the Middle East. Your history teacher has recently given a very good lecture of the Middle East, so you ask him for permission to use your notes from the lecture in your speech. He agrees, and you use several of his class notes in your speech, citing them both verbally and on your works cited page. You also use the entire PowerPoint presentation that your history teacher used in class, which you still had on K-State Online. You also cite this.

Can you be accused of plagiarism?

Why or why not?

Class Period 4 – Narration (Chapter 4)

Purpose: This activity is designed to allow students an opportunity to think about how anything can be made into a narrative with the essential elements (character, setting and plot).

Time Allotment: Allow 5 minutes for groups to discuss and write their answer. Allow 10 minutes for class discussion.

Materials Needed:

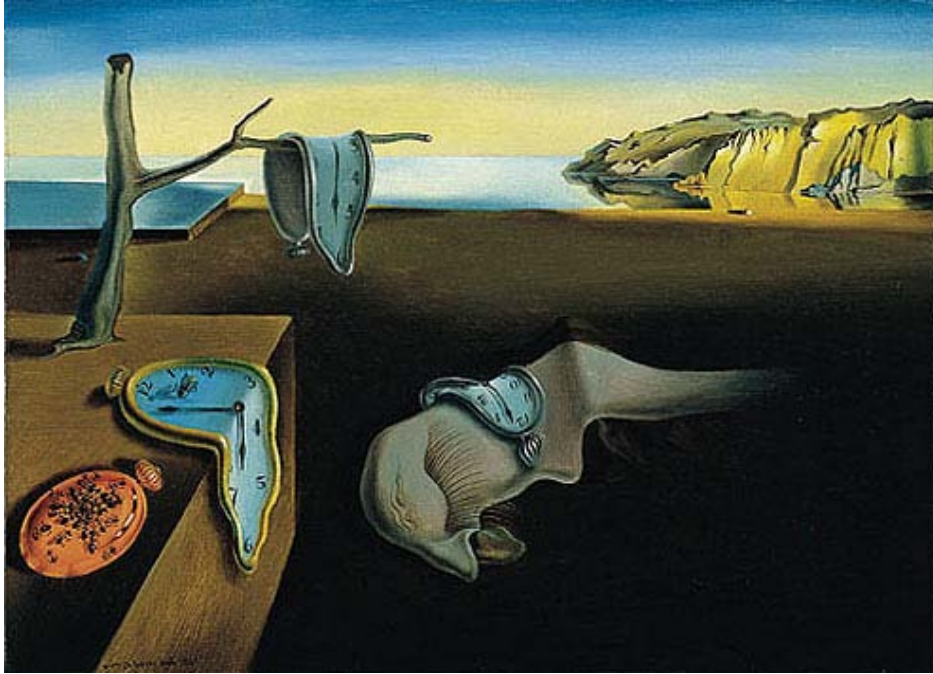
1. Narration Worksheet
2. History of *The Persistence of Memory*

Procedure:

1. Divide students into groups.
2. Provide each group with a copy of the Narration Worksheet.
3. Instruct groups to answer the questions and create a narrative about the painting on their worksheet.
4. Walk around the classroom checking on students' work, ensuring that they're staying on task, and answering any questions they might have.
5. Ask each group to briefly share the narrative they created.
6. Point out how all of the narratives are different and that anything can be made into a narrative if it has the essential elements.
7. Share the history of the painting.

Narration Worksheet

Names: _____



Artist: Salvador Dali

Artwork: *The Persistence of Memory*

Year: 1931

Medium: Oil on canvas

Dimensions: 9.5 in. by 13 in. or 24.1 cm by 33 cm

Location: The Museum of Modern Art, New York

1. Create a narrative about this painting
2. Who/what are the characters?
3. What is the conflict?
4. What is the resolution?

No Group Work

Class Period 1 – Orientation (Syllabus)

Purpose: This activity is designed as an icebreaker to introduce students to one another.

Time Allotment: Fifteen minutes total at the end of class.

Materials Needed: None.

Procedure:

1. Write the following bullet points on the board:

- Name
- Hometown
- Class/Major
- Fun Fact

2. Have each student take time to introduce themselves to the class answering the bullet points.

- Example: “Hi! My name is Janey Smith. I grew up in a suburb of Kansas City, Kansas. I’m a junior in Animal Science. And a fun fact about me is that I have a pet porcupine named Hiccup.”

Class Period 2- Decision Making and Decision Factors (Chapters 1 & 2)

Purpose: This activity is designed to help students remember the differences between the three concepts covered in this class period: decision factors, global decisions, and local decisions.

Time Allotment: Fifteen minutes total at the end of class; 5 minutes for students to think and write their answers, 10 minutes for class discussion. Students should turn in their answers at the end of class to ensure each student completed the assignment. Allot 1 point for completing this assignment.

Materials Needed: None.

Procedure:

1. Number each student from 1-5. Assign students a party to plan that corresponds to their number.

1. Mom or Dad's 50th birthday party
2. Graduation party for a high school student
3. Bridal shower for a 20 year female
4. Grandparent's 50th wedding anniversary
5. Moving away party for a college student

2. Have students plan a party based on the following (be sure to have them write their answers on a piece of notebook paper with their name on it):

- Decision Factors
 - What kind of party to have
 - Assignment/Context
 - Where to have the party
 - Physical Location
 - How many people to invite and whom
 - Audience Background
 - How much money to spend
 - Resources
- Global Decisions
 - Theme for the party
 - Topic
 - Guest of Honor
 - Thesis

- Purpose of the party
 - Audience Outcome Goal
 - Activities to plan
 - Main Points
 - Local Decisions
 - How to greet your guests
 - Introduction
 - What to wear
 - Delivery
 - Decorations
 - Support Materials
 - Gifts and party favors
 - Conclusion
3. Walk around the classroom checking on students' work, ensuring that they're staying on task, and answering any questions they might have.
 4. When students have used the time allotted for planning their assigned party, host a discussion about students' answers. You can equate a number of things to make this a successful activity. Ask your students to brainstorm other comparisons of feature between planning a party and planning a speech.

Class Period 3 – Global and Local Decisions (Chapter 3)

Purpose: This activity is designed to get students thinking deeper about plagiarism.

Time Allotment: Fifteen minutes total at the end of class; 5 minutes for students to think and write their answers, 10 minutes for class discussion. Students should turn in their answers at

the end of class to ensure each student completed the assignment, along with their completed Activity 3.5 from their textbooks. Allot 2 points for correctly completing this assignment.

Materials Needed:

1. Activity 3.5 from the *Creating Speeches* textbook.
2. Plagiarism Worksheet

Procedure:

1. Instruct students to complete Activity 3.5 from their *Creating Speeches* textbook as well as the Plagiarism Worksheet. They may not finish in the allotted time, but they should at least try.
2. Walk around the classroom checking on students' work, ensuring that they're staying on task, and answering any questions they might have.
3. Discuss the answers as a class. Ask students to present their answer to one of the questions from the textbook or the worksheet. Have them explain why they chose that answer; ask the rest of the class if they agree or disagree. Feel free to play "devil's advocate" to encourage discussion.

Plagiarism Worksheet

Names: _____

1. You and your roommate are both taking Introduction to Public Speaking this semester, but are in different classes. You have prepared your Comparison Speech outline and turned it into your teacher, early, to be reviewed. Your roommate, however, has procrastinated on preparing his or her speech. The night before the outline is due, your roommate is panicking. You take pity on him or her and offer your roommate the articles and books that you used for research on your

speech and you discuss the three main points you used in your speech. You tell your roommate that he or she must do the rest of the work.

Is this plagiarism?

Why or why not?

2. You find a speech online about health care reform. You like the organization of the speech, but think you could do better. You decide to re-do the speech, deleting most of it and just keeping the organization and the few good points that the speaker made. You add your own research and several of your own main points.

Is this plagiarism?

Why or why not?

3. You have decided to do your final speech on the life and works of your favorite architect. You have been studying this architect since high school, and have used him for several different papers and presentations. While writing your speech, you simply expand a smaller presentation you gave over a year ago. You also use a short video that you created in high school as your attention getter.

Is this plagiarism?

Why or why not?

4. Your public speaking teacher has assigned a group project that is due the next class period. You and your group members divide up the work in equal parts, and agree to put it all together before class. You all meet that morning and during the meeting you realize that one of the group members has copied and pasted some of her material from Wikipedia. Class starts in ten minutes and you are afraid if you leave out her part of the speech you will lose points. You make sure that Wikipedia is on the works cited page and hope for the best.

Can you be accused of plagiarism?

Why or why not?

5. You are giving a speech about the history of the Middle East. Your history teacher has recently given a very good lecture of the Middle East, so you ask him for permission to use your notes from the lecture in your speech. He agrees, and you use several of his class notes in your speech, citing them both verbally and on your works cited page. You also use the entire PowerPoint presentation that your history teacher used in class, which you still had on K-State Online. You also cite this.

Can you be accused of plagiarism?

Why or why not?

Class Period 4 – Narration (Chapter 4)

Purpose: This activity is designed to allow students an opportunity to think about how anything can be made into a narrative with the essential elements (character, setting and plot).

Time Allotment: Allow 5 minutes for students to think and write their answer. Allow 10 minutes for class discussion.

Materials Needed:

1. Narration Worksheet
2. History of *The Persistence of Memory*

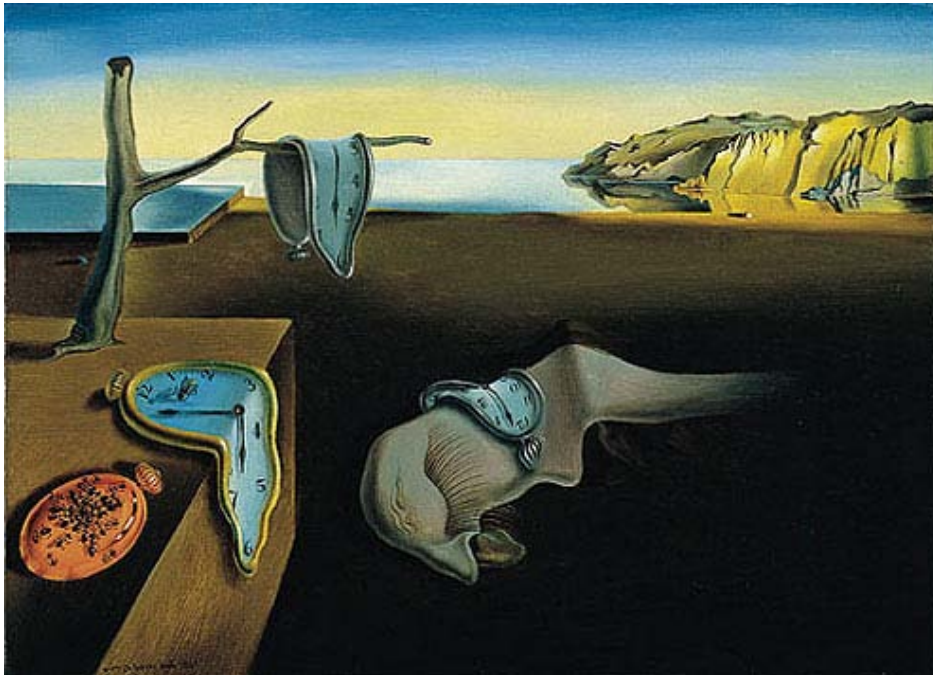
Procedure:

1. Provide each student with a copy of the Narration Worksheet.
2. Instruct students to answer the questions and create a narrative about the painting on their worksheet.

3. Walk around the classroom checking on students' work, ensuring that they're staying on task, and answering any questions they might have.
4. Ask each student to briefly share the narrative they created.
5. Point out how all of the narratives are different and that anything can be made into a narrative if it has the essential elements.
6. Share the history of the painting.

Narration Worksheet

Names: _____



Artist: Salvador Dalí

Artwork: *The Persistence of Memory*

Year: 1931

Medium: Oil on canvas

Dimensions: 9.5 in. by 13 in. or 24.1 cm by 33 cm

Location: The Museum of Modern Art, New York

5. Create a narrative about this painting
6. Who/what are the characters?
7. What is the conflict?
8. What is the resolution?

Appendix C - The CAPS

1. I worry that the instructor will call on me during class.
2. If I have a question, I will probably wait for someone else to ask it in class.
3. I probably won't speak in class because I don't feel I have as much to say as some of the others.
4. I won't speak in class unless the instructor calls on me.
5. I often have difficulty organizing my thoughts when I want to say something in class.
6. I enjoy assuming the role of leader during a class discussion.
7. I am hesitant to speak during class because I think the other students will do better.
8. I probably won't speak in class even when I think I know the answer to a question.
9. I look forward to participating in discussion because I feel I can convince others.
10. I will avoid speaking in class discussions if possible.
11. If the instructor calls on me during discussion I wouldn't know what to say.
12. I will probably participate in class more than most other students.
13. I am afraid the instructor or the other students won't understand what I'm trying to say.
14. I would rather listen than participate in class discussions.
15. I look forward to speaking in class discussions because I think students will listen to me.
16. I am hesitant about speaking in class unless the instructor specifically asks for questions.
17. I am afraid I will say something wrong during a discussion.
18. I will speak during a class discussion even though I'm not required to do so for my grade.
19. I feel too tense or nervous to participate in class.
20. I usually avoid enrolling in classes that I think require class participation.