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# COMMUNICATION CROSSROADS: ASSERTIVENESS PEDAGOGY FOR COLLEGE WRITERS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD)

A Dissertation Presented to the Graduate School of Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy
Rhetorics, Communication, and Information Design

by Dev Kumar Bose December 2011

Accepted by:
Dr. Bryan Denham, Committee Chair
Dr. Huiling Ding
Dr. Darren Linvill
Dr. Arlene Stewart

### ABSTRACT

This study seeks to explore the phenomenon of why some adults with attention deficit/hyperactivity disorder (ADHD) have difficulties in communicating in groups at school and work, despite the integration of collaboration within the curricula of college oral and written communication courses. The purpose of this multiple case study was to explore a sample of college writers' with ADHD perceptions on difficulties with their writing, as well as to evaluate an intervention which utilized communication-based classroom scenarios. The research employed qualitative methods to investigate the phenomenon under study. Participants in the study consisted of a criterion-sampled group of 10 individuals from Clemson University aged 18 and over, had documented evidence of ADHD, and were previously and/or currently enrolled in a college writing course. Findings from this project inform higher educational practice across several disciplines.

# **DEDICATION**

To my father, an engineer who faced daily challenges when working in task forces related to production and safety. To my sister, a librarian who regularly collaborates with colleagues to revise databases and make the world a safe place for research. To my friends, who encouraged me to persevere through a difficult time. And above all, to my wife for her love, patience, and support. After all this time, we're happy together. Thank you.

#### **ACKNOWLEDGEMENTS**

An Institutional Review Board (IRB)-approved research team was established in to conduct the study. The team's principal investigator (PI) was an endowed professor of Communication Studies. Additional research team members consisted of myself [a doctoral candidate from Rhetorics, Communication, and Information Design (RCID) (an interdisciplinary humanities doctoral program at Clemson University)], as well as faculty from Communication Studies, English, and Student Disability Services. I acted as the primary contact for the participants and, of course, wrote the dissertation. All research team members had been published in qualitative and quantitative research. Thus, the researchers brought academic expertise to the project, and contributed noteworthy professional experience by being directly involved in the university environment.

My vested interest in conducting the study stems from personal and professional reasons: As a writer suffering from ADHD symptoms, I explained to participants that I was investigating their college experiences from firsthand perspective and that their responses would help to further research on ADHD and communication practices for students in collaborative settings.

As scholarly readers, each member of my advisory committee played an integral role throughout the dissertation process. Dr. Arlene Stewart, along with the staff of Clemson University's Student Disability Services, helped me to obtain participants for the multiple case study and to understand how college students with ADHD communicate

inside and outside the classroom. Dr. Darren Linvill helped me to apply concepts of pedagogy specific to communication studies to college writers with ADHD. Dr. Huiling Ding helped me to analyze the data and structure the literature in professional communication. My chair, Dr. Bryan Denham, helped me by closely analyzing and reporting the information in a professionally acceptable manner; his mentoring of my writing allowed me to get to where I am today. Thank you to my advisory committee for being such helpful and supportive readers.

This dissertation would not have been possible without the help of Dr. Summer Taylor Smith, one of the original readers who passed away during the time of writing. It is hoped that an inkling of her background in pedagogies of group communication shines through in this dissertation. Thank you, Dr. Taylor, for seeing me through this.

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### CHAPTER 1

#### INTRODUCTION TO THE STUDY

"The paucity of normative information on the developmental progression of ADHD leads to a wide variation in clinical and research approaches for identifying and diagnosing the disorder. In response to these observations, NIMH is now supporting interdisciplinary research networks on ADHD, to translate what is already known in the basic sciences ... into clinical preventive, interventive and treatment strategies."

(National Institute of Mental Health, 2002)

This study seeks to explore the phenomenon of why some adults with attention deficit/hyperactivity disorder (ADHD) have difficulties communicating in groups at school and work, despite the integration of collaboration within the curricula of college oral and written communication courses. The study explores a sample of ADHD college writers' perceptions on their writing practices, and attempts to address whether assertiveness training might foster more effective group communication. Ideally, knowledge generated from this research will inform higher education practice across several disciplines. The research employed qualitative methods to investigate the phenomenon under study. Participants consisted of a criterion-sampled group of 10 individuals from Clemson University aged 18 and over, who had documented evidence of ADHD, and who were previously and/or currently enrolled in a college writing course.

This chapter offers an overview of the background and context that framed the study, followed by a problem statement, statement of purpose, and research questions. Following these segments is an overview of the research approach that was employed.

Assumptions of the phenomenon under study are also included. The chapter concludes with the rationale and significance behind carrying out the research. Definitions of key terminology used in the research are included in Appendix J.

## **Background and Context**

The National Institute of Mental Health (NIMH) defines ADHD by its key behaviors: "Inattention, hyperactivity, and impulsivity" (2008, p. 3). ADHD is problematic because of the consequences it has on academic and professional functioning: The NIMH also notes that ADHD may be mistaken for emotional and disciplinary problems (2008). Adults affected by ADHD often suffer from the added consequence of financial dilemma: Tuckman (2007) notes that "ADHD adults with high school diplomas have annual household incomes that are lower by \$10,791 and \$4,334 for college graduates" (p. 3). In regard to financial dilemma, the problem of occupational functioning is important to consider: "ADHD adults are two-thirds more likely to have been fired; three times more likely to have impulsively quit their jobs; one-third more likely to report chronic employment difficulties; and 50 percent more likely to have changed jobs in a given time period" (Tuckman, 2007, p. 3). Clearly there are issues that need to be examined.

This dissertation addresses writing pedagogies for college students with ADHD. It draws upon scholarship in group communication and professional communication to

consider how ADHD affects adult writers. The project contributes to current scholarship by introducing assertiveness training into the writing process.

Paterson's Assertiveness Workbook (2000) describes assertiveness training as training clients to understand and control their own ability to stand up for themselves and get their message across in a clear manner. By demonstrating that self-perception and projected perception of others is self-dictated, the technique teaches clients how to negotiate with others (Meier & Pulichene, 1980; Paterson, 2000). The study in the present dissertation built on existing communication pedagogies by tying them into one particular method to improve social skills as they are taught in therapy; the teaching is termed assertiveness training (Paterson, 2000; Messer; 2010; Curtet, 2011). In this dissertation, assertiveness is defined as communication that directly and concisely appeals to an audience.

The common thread between the researcher's¹ approach, training method, and teaching is assertiveness: To what extent would teaching assertiveness improve the communication of college writers with ADHD within collaborative settings at school and work? Research shows that assertiveness training improves decision-making skills:

According to Brynielsson and Wallenius (2003, p.5), decision-making is a four-step process in which an individual *defines preferences*, *evolves strategies*, *predicts consequences*, and *evaluates the overall fitness* of solution(s). Task forces -- teams that have been formally created to solve a problem -- use this process when collaborating on

<sup>&</sup>lt;sup>1</sup> The writer of this dissertation refers to himself as "the researcher" throughout the document.

some decision. Individuals with ADHD use the same process when making decisions, but timing is difficult when working with others. The researcher believed that teaching writing in collaborative settings would improve how college students with ADHD communicate in team settings.

The research in this dissertation tested whether assertiveness training was an appropriate method for the teaching of writing. Assertiveness training, a behavior modification therapy, is a process designed to teach clients that actions are self-willing. Much like the writing process, assertiveness training is a lifelong process that participants engage in to become more effective communicators. Messer (2010) explains the effectiveness of assertiveness training with therapy clients, particularly those with ADHD. By demonstrating that self-perception and projected perception of others is self-dictated, the technique teaches clients how to negotiate with others (Meier & Pulichene, 1980; Paterson, 2000). While the therapist acts as a coach early in the process, the client learns "to build assertive behavior as a habit ... to practice" (Paterson, 2000, p. 197). Due to difficulties with time management and goal-setting, especially in the workplace, the necessity to negotiate through means of professional writing and communication often proves to be difficult task for adults who have been diagnosed with ADHD.

Individuals with ADHD are faced with a host of difficulties with goal-setting and time-management, requiring "clarity of expectations, assistance through transitions, modeling and guiding, flexibility, and predictability of schedules and routines" (Rief, 2008, p. 92-93). They are aware of being negatively perceived by their peers: Frankel and

Feinberg (2002) reported that children with ADHD "think about less friendly and effective, more assertive and impulsive solutions to social problems than their non-ADHD peers" (p. 132). Social skills training is therefore beneficial to people with ADHD. Being assertive is an important social mechanism that plays a role in "social enhancement" (Frankel & Feinberg, 2002, p. 129). Because people with ADHD engage in impulsive behaviors that are more than likely to end in failure, depression and anxiety often result (Tuckman, 2005).

Success strategies like assertiveness training overlap with techniques used for depression and anxiety, in that these strategies require an ongoing effort (Forsyth & Eifert, 2007; Strohsahl & Robinson, 2008). On a similar note, scholars agree that writing itself is an ongoing process developed through stages (Berthoff, 1978; Elbow, 1998; Flower, 1998; Gere, 2005). Assertiveness training has proved to be an effective method across several contexts. Carlisle and Donald (1985) speculate that art may be helpful in reinforcing assertive behaviors. Tavokoli, Lumley, Hijazi, Slavin-Spenny, and Parris (2009) found that a combination of assertiveness training and private expressive writing improved acculturative stress for international exchange students. Dyer and Teggart (2007) studied how bullying victims with ADHD were taught to engage in assertive behaviors, with successful results. Hanrahan, Gitlin, Martin, Leavy, and Frances (1984) found that assertiveness training with anxiety disorder patients has been beneficial.

Given the benefits of assertiveness training across these multiple contexts, further research needs to be done to show how college writers with ADHD can benefit from a

strategy that systematically teaches them social awareness at the level of written and oral communication. This dissertation addresses the gap in research by proposing a writing model grounded in assertiveness training. The overarching research question that was answered through a qualitative approach was: How can assertiveness training be used to help college writers with ADHD?

## **Problem Statement**

A NIMH-funded study conducted at Harvard University found that an estimated 4.4% of adults ages 18-44 in the United States have ADHD (Kessler, 2006). Many college students have been diagnosed with ADHD, yet receive inadequate accommodations in writing courses for their needs (Tuckman, 2005). Hence, despite the emphasis on collaboration in communication courses, these people may not receive the proper social skills training necessary for effective communication in the workplace. There is little information how social skills training may impact professional communication.

# Statement of Purpose

The purpose of this multiple case study was to explore a sample of ADHD college writers' perceptions on difficulties with their writing, as well as to evaluate the effect of teaching assertiveness in communication-based scenarios in the classroom. The study sought to develop a pedagogy that was based on assertiveness training.

### **Research Ouestions**

The following questions guided the study:

- 1. Upon enrollment in a college writing course, to what extent did participants perceive they were prepared for peer writing workshops?
- 2. What did participants perceive they needed to learn to communicate proper feedback on drafts of their work?
- 3. How did participants attempt to develop the knowledge, skills, and attitudes (KSA) they perceived as necessary to achieve success in writing courses?
- 4. What factors did participants perceive might help them discover how college coursework specific to their major versus general coursework could prepare them to communicate effectively in the workplace?
- 5. What factors did participants perceive have impeded, improved, and/or had no effect on their communication skills after assertiveness training intervention?

# Research Approach

A qualitative research approach was used to answer these questions. A multiple case study was performed at Clemson University during Spring, Summer, and Fall 2011. Clemson, a land-grant institution located in South Carolina, was an ideal site to conduct the study based on participant availability and geographic proximity. With the support of Student Disability Services (SDS) to ensure anonymity prior to the study, 10 participants were selected using criterion-based sampling. According to Bloomberg and Volpe (2008),

criterion-based sampling uses categories to restrict a pool of applicants: To qualify for the study, individuals had to be aged 18 or over, have documented evidence of ADHD, and have enrolled in a college writing course (prior to or during the study). All participants had taken a college writing course within a year and a half of the study.

Regarding data-collection methods, a pilot study was initially performed, followed by a larger study. Methods of collecting data included interviews, inventory (including questionnaires and worksheets), direct observation, role play, and document review. The researcher was interested in collecting data that would be "descriptive ... interpretive ... [and] theoretical" (Bloomberg & Volpe, 2008, p. 37) in terms of each participants' communication practices in collaborative settings: Therefore, data included observable behaviors during sessions, the meaning of collaborative situations at school and work as explained by each participant, and the examination of why select events occurred as a means to understand the phenomenon under study.

Field note summaries and graphic depictions (Blakelee & Fleischer, 2007, p. 165) were essential for carrying out preliminary and ongoing data analysis, due to the vast extent of data that was collected. Coding (Blakelee & Fleischer, 2007, p. 175) and indexing (Blakelee & Fleischer, 2007, p. 182) were used to create categories based on the research questions (described above) and the definitions (described below), and revolved around group communication practices and analysis of changes between submission of drafted essays. Additionally, because participants answered basic questionnaires, measures of central tendency and variability (Bloomberg & Volpe, 2008, p. 97) -- i.e., the

average of scores and the extent to which the scores differ from each other -- were used as simple descriptive statistics to augment and support the qualitative data. Most importantly, discourse analysis and discourse-based interviews were combined to obtain critical information regarding participants' group communication practices and to assess the value of assertiveness pedagogy. Discourse analysis "discern[s] patterns" of stylistic and grammatical features within the drafted essays (Blakelee & Fleischer, 2007, p. 122), while discourse-based interviews collect data on the various elements of textual revision. Discourse-based interviews were especially useful for collecting information about decision-making processes of the phenomenon under study. As Blakelee & Fleischer (2007, p. 123) indicate, this strategy of data analysis is particularly useful for researchers studying workplace writing.

# Researcher Assumptions

Based on the researcher's experience as an instructor whose students had ADHD, as well as having close friends with ADHD, the study proceeded based on certain assumptions: First, college writers with ADHD do not feel prepared for peer writing workshops. Second, college writers with ADHD assume they have to take on seemingly contradictory roles during peer writing workshops, including "aggressive" authority and "passive" listener. Third, college writers with ADHD perceive success in writing courses as the ability to write critically, as well as apply analytical skills in other courses. Fourth, while college writers with ADHD see group communication skills they learn in college

courses other than writing as being vital to the workplace, they do not perceive group communication in writing courses to be nearly as vital. Fifth, college writers with ADHD correlate assertiveness to the writing process, group communication during writing workshops, and communication at the workplace. These assumptions are revisited in Chapter 4.

## Rationale and Significance

The study was developed to address misunderstood beliefs of adult ADHD in academic and professional settings: Management, inconspicuousness, and recognition of the condition. Current research trends focus on managing ADHD in children and adolescents: Adult ADHD is considered to be secondary, since the outward display of symptoms dissipates post-adolescence. Instructors and administrators who comprehend the presence of adult ADHD help create supportive learning environments for these individuals. Therefore, this study addresses the importance of helping adults with ADHD get the most out of communication across the curriculum by helping them be better collaborators.

The study sought to contribute to theory, practice, and policy surrounding the phenomenon under study. The study presented assertiveness pedagogy as a strategy for academic and professional communication. In theory, the study hoped to recognize the implications of studying writing as a behavioral therapy, thereby proposing a methodology *without* the necessity of students being enrolled in a class designed for

writers with disabilities. As a behavioral therapy modified for the classroom, assertiveness training was believed to be a less intrusive way of managing symptoms than medication (Brantley, 2003; Forsyth & Eifert, 2007). In practice, the researcher believed that the study would engage the collaborative practices of college writers with ADHD by proving to augment their professional success. In terms of policy, the researcher anticipated that results would prove useful for higher education (HE) instructors teaching composition and professional communication courses, and also as a professional development training tool designed for instructors teaching communication across the disciplines.

#### CHAPTER 2

### REVIEW OF LITERATURE

The purpose of this multiple case study was to explore a sample of college writers' with ADHD perceptions on difficulties with their writing, as well as to evaluate an intervention which utilized communication-based classroom scenarios. The researcher sought to understand how college writers with ADHD communicate in groups at school and work, as well as to assess the pedagogical value of assertiveness training. To fulfill these objectives, a pilot study was performed, which was followed by a larger study.

Assertiveness training (Cooper, 2007; Holland & Ward, 1990; Messer, 2010; Paterson, 2000; Sorenson & Commodore, 1995; Tuckman, 2007) is a phenomenon which the researcher believed would improve the writing of college writers with ADHD. To carry out this study, it was necessary to complete an ongoing review of current literature on the subject (Bloomberg & Volpe, 2008, p. 59).

The literature review explores the relationship between participants' perceptions of their writing process, as well as collaborative and professional communication experiences. Given the nature of this relationship, as well as the pedagogical aim of the study, the researcher reviewed the following three bodies of literature: A) task selection and usage in collaborative settings; B) composition design and production processes; and C) communication practices and strategies for college writers with ADHD. First, the researcher reviewed literature on task selection and usage in collaborative settings to understand the group decision-making processes of college writers. Next, the researcher

reviewed literature on composition design and production processes to understand how group decision-making informs academic and professional practices. Finally, the researcher reviewed literature on communication practices and strategies for college writers with ADHD to understand how participants perceived knowledge, skills, and attitudes (KSA) of composition coursework, and whether assertiveness training affected their academic and professional practices.

To conduct this literature review, the researcher used multiple scholarly and professional resources that were accessed through select university library databases. Due to the interdisciplinary nature of the dissertation, resources from several fields were considered for their intersection across several subgenres. For example, the literature in task selection and usage in collaborative settings was selected from disability studies, rhetoric and composition, and communication studies. Due to the substantial amount of ongoing research in ADHD and pedagogy, literature was reviewed throughout data collection, analysis and synthesis: Setting a specific delimiting time on literature review would have been problematic, since doing so would have precluded the inclusion of substantial relevant material (Bloomberg & Volpe, 2008, p. 60).

Throughout the review, the researcher attempted to point out important gaps and omissions in each area of the literature, as well as to explore contested areas and issues within each body. The chapter begins by devoting sections to each body of the literature described above; each section closes with a topic summary of future directions and recommendations. The chapter concludes with an overall summary of how the literature

has informed the researcher's understanding of the material, as well as a conceptual framework of the study (adapted from Bloomberg and Volpe, 2008, p. 190).

# Area 1: Task Selection and Usage in Collaborative Settings

The primary area of literature that informs this study is task selection and usage in collaborative settings. In dealing with the phenomenon of why some adults with ADHD have difficulties in communicating in groups at school and work, the researcher was faced with a problem: To what extent were the group decision-making processes of college writers understood?

Theoretical Developments in Collaboration and Cognition

Task selection and usage in collaborative settings refers to the processes by which individuals make group decisions. According to Mennecke & Wheeler (1993), decision-making revolves around the ability of a group to select and carry out problem-solving tasks. The authors suggest six critical task issues that challenge problem-solving groups: Appropriateness of the task for the subjects; subject intellectual engagement; control for the differences in subject preferences, needs, and experiences; the level of task complexity; conjunctive versus disjunctive tasks; and measurement of solution quality (1993, p. 6).

How do task selection and usage manifest in the classroom? Bruffee (2003) idea of the "conversation of mankind" suggests that interaction with others is essential to learning. Bruffee argues that knowledge is created through social interaction. Closely tied

to the conversation of mankind is Englert and Mariage's idea that writers create a dialogue between texts and other writers (1991, p. 330). Composition students can participate in peer writing workshops to understand that writers write for a real audience and have a genuine purpose. The dialogue emerging from peer writing workshops echoes the conversation of mankind by implying that a sense of community exists in the composition classroom. The researcher interpreted this literature to mean that *writers* work with another to make decisions about their writing.

How do writers make decisions for what they write? Long-standing research in rhetoric and composition suggests that writing decisions are informed by invention and discovery (Berlin, 2003; Berthoff, 1978; Elbow: 1998,1998, 2000; Howard, 2001; Lamott, 1995; Lindemann, 2001; Lunsford & Ede, 1990). Elbow (1998) points out the need to guide student writers through a series of stages consisting of peer workshops and instructor-student conferences, arguing that it is at these crucial "checkpoints" that invention and discovery of ideas occur. *Writers invent and discover ideas together*.

Pooling together several students' knowledge of the writing process, regardless of ability level, creates a cohesive classroom community in which writers are given the chance to critique others's work. Berthoff (1978) extends Bruffee's "conversation of mankind" (2003) by theorizing that meaning is communicated through language, and that meaning takes place through social interaction. Berthoff (1978) and Elbow (1998; 1998; 2000) both agree that the composing process is itself one that is inventive. Parallel to this notion is Howard's thought that "collaborative pedagogy is not so much an alternative

pedagogy as it is an accurate mirroring of the true nature of writing" (2001, p. 55). When writers review each other's work, they learn about the strengths and weaknesses of their own writing. The researcher interpreted this literature to mean that *collaboration in the writing classroom presents valuable opportunities for feedback*.

To round out these theories is the role of cognition. An impressive body of scholarship on the role of cognition (Flower: 1994, 1996, 2003; Flower & Ackerman, 1994; Flower & Hayes, 2003) suggests that successful peer collaboration is dependent upon the ability to structure and abstract ideas. Structure refers to the writer's ability to conform to convention, while abstraction refers to the writer ability to apply ideas in other contexts. Using cognitive theory, Flower and Hayes (2003) triangulate the writer within her task environment, long-term memory, and actual writing process. These components make up the writer's rhetorical situation, or the set of circumstances which dictate how communication takes place. The researcher interpreted this literature to mean that, when a writer understands the rhetorical situation of a text, the writer can analyze and critique that text.

### **Development Across Time**

**Problem-based learning (PBL).**<sup>2</sup> PBL is a way for students to find a collaborative solution to a given scenario. The instructor first provides an ill-structured problem (e.g., the presence of nuclear waste near a school site). Working together,

<sup>&</sup>lt;sup>2</sup> For ease of reading, the following acronyms are used in this section: PBL (problem-based learning), LD (learning disorders), self-directed learning (SDL), SRSD (self-regulated strategy development), and CSIW (cognitive strategy instruction in writing).

students identify the known facts of the situation. Based on these facts, student teams generate potential problem-solving hypotheses. To evaluate the situation, teams need to identify knowledge deficiencies and then apply new knowledge to provide a well-structured solution. At the end of the process, students reflect on how they came to a solution. This last stage tests their ability to abstract concrete issues into other areas. The instructor facilitates throughout the process, providing in-process assessments. PBL requires a structured whiteboard on which students create a visual representation of the problem. Besides collaboration, PBL also requires instructors to model effective problem-solving strategies, thus facilitating the learning process.

Hmelo-Silver (2004) studied the effects of PBL on medical students and concluded that more research needed to be done with less skilled students. The stages of PBL (understanding facts, identifying issues, recognizing gaps in knowledge, and applying an action plan that can be abstracted elsewhere through reflection) utilize collaboration: In the study, each student was expected to break down an issue and work at solving the issue with others. Facilitating the problem solving helped students to build their SDL. The researcher found that "self-directed learning" supported effective collaboration (Hmelo-Silver, 2004, p. 247); moreover, the analysis of "realistic, ill-structured problems such as medical diagnosis" (Hmelo-Silver, 2004, p. 236) were found to be helpful because they were context-driven: That is to say, diagnosis was a relevant problem for medical students to solve during PBL. *Problem-based learning forms the foundation for task management and usage in collaborative settings*.

Self-regulated strategy development (SRSD). SRSD takes advantage of instructional modeling as well, but differs from PBL in that its learning objectives are directed toward helping students with planning and goal setting, which are areas of difficulty for students with LD (Graham & Harris, 2005). To achieve these objectives, instructors utilizing SRSD must employ scaffolding, allowing students to independently master tasks. A favorable method of SRSD is the use of peer writing workshops. Peer writing workshops engage scaffolding by transferring the responsibility of document review to students. Workshops need to be structured in order to be efficient. The structure of peer writing workshops encourages students to complete tasks in a timely fashion.

A study conducted by Englert and Mariage (1991) concluded favorable findings regarding the use of peer writing workshops as a form of SRSD. At the same time, the study showed that writing workshops must be highly structured to be effective for writers with LD. The study concluded that skilled writers reveal two forms of "organizational knowledge" during peer reviews: The knowledge of "recurring patterns or text structures ... among story narrative or expository ideas ... as well as ... [the employment of] general metacognitive processes that guide self-regulation" (p. 330). The ability to recognize relationships within texts is a crucial part of the structuring of a writing workshop. The same study revealed that writers with LD have difficulty exhibiting organizational knowledge, favoring "a process of knowledge generation that was associative in nature; that is, each idea was linearly and associatively related to the previous idea" (334). While Berthoff (1978) and Elbow (1998; 1998; 2000) reveal the

nature of writing to be inventive, Englert and Mariage (1991) demonstrate that peer writing workshops can be used to diversify group interaction through multiple intelligences. Self-regulated strategy development is important to task selection and usage because it encourages students to work together on implementing and evaluating problem-solving strategies.

Cognitive strategy instruction in writing (CSIW). CSIW is related to the cognitive theories of composition described by Flower and Hayes (2008). The structure of CSIW combines PBL and SRSD, but differs from the other instructional methods by focusing on writing instruction as a product of cognitive theory. Crucial to this dissertation is the triangulation of the stages that take place during CSIW: Writing, dialogues, and collaboration. According to Hallenbeck (2002), the first stage "[engages writers] in the processes and strategies related to planning, organizing, writing, editing, and revising." (p. 229). The second stage utilizes "think-alouds' ... to model the thinking and inner talk reminiscent of expert writers (p. 229), while the third stage reminds students of the importance of audience and purpose by integrating collaborative partnerships with other students (p. 228). The use of CSIW is justified for students with LDs by encouraging these students to envision writing as a set of processes whose endgoal is to solve problems. CSIW helps writers with the underdevelopment of their rhetorical memory (Flower & Hayes, 2008, p. 279) and the retrieval and reorganization of information from their long-term memory, issues closely related to time management and goal-setting (Graham & Harris, 2005). While CSIW is clearly an application of cognitive

theories of composition, the researcher hoped to extend ideas presented within these theories by exploring methods focusing on being direct, concise, and applied through compromise—that is to say, assertive.

CSIW utilizes SDL, which encourages self-awareness of writing processes and strategies. Techniques associated with CSIW include think-alouds, social interaction, semantic webbing (e.g., flow charts), and visuals. CSIW also utilizes the visual and audio senses of the learners in an attempt to augment learning. CSIW relies upon these techniques at each stage in order to promote independent task completion: The instructor first guides the learning process through modeling approaches, then scaffolds learning objectives through highly structured learning activities, and finally utilizes collaboration at the student level to synthesize learned skills in other contexts. A gap in the literature exists at the collaborative stage of CSIW. The researcher interpreted the literature to mean that, while research on college writers with ADHD describe the usefulness of CSIW, few closely studied collaborative decision-making amongst this population.

The benefits of CSIW are substantial. CSIW informs learners with language impairment disorders and attention-deficit hyperactivity disorder (ADHD). One researcher who studied ways to improve student writers with language impairment and ADHD addressed the executive functions (Barkley, Murphy, & Fischer, 2010)—verbal working memory, internalized speech, self-regulation, planning—with which these learners have issue. Executive functioning is necessary to carry out difficult and highly abstract tasks like writing. Individuals with ADHD have problems with writing because

of impairment with these issues. The researcher interpreted this literature to mean that cognitive strategy instruction in writing helps students to understand the rhetorical situation of texts; it also helps develop goal-setting and time management skills within the context of writing.

The models described here were used in several studies related to individuals with LD. Published as a recent doctoral dissertation (2009), Jacobson used CSIW to teach high school students with ADHD who were struggling with writing. The subjects successfully accomplished the intended goals of the study: To independently write full-length essays, that is, without help from an instructor; to increase essay planning time; to increase essay length; to include essay components with an emphasis on transitions; and to obtain feedback from peers and instructor when needed.

# Topic Summary of Area 1

The following conclusions were drawn from the first area of literature, task management and usage in collaborative settings:

- I. Writers work with another to make decisions about their writing.
- II. Collaboration in the writing classroom presents valuable opportunities for feedback.
- III. When a writer understands the rhetorical situation of a text, the writer can analyze and critique that text.
- IV. Problem-based learning forms the foundation for task management and usage in collaborative settings.

- V. Self-regulated strategy development is important to task selection and usage because it encourages students to work together on implementing and evaluating problemsolving strategies.
- VI. While dissertations about college writers with ADHD describe the usefulness of group work, few closely studied how decision-making occurs amongst this population.
- VII.Cognitive strategy instruction in writing helps students to understand the rhetorical situation of texts; it also helps develop goal-setting and time management skills within the context of writing.

# Area 2: Composition Design and Production Processes

The researcher reviewed literature in composition design and production processes. In dealing with task usage and selection in collaborative settings, the researcher was faced with a problem: How would college writers with ADHD perceive group-decision making in academic and professional settings?

Theoretical Developments in Design and Production

An important theoretical development in design and production process is consideration of the user's role. Johnson's concept of user-centered design (1998) is important to design and production. The model is concerned with knowledge production, which includes functions of doing, learning through doing, and producing. Designers must consider the user as a citizen who is framed by, and frames, production processes.

The user-centered model, as a whole, is ergodynamic because it keeps the user at the height of design and production processes. The researcher interpreted this literature to mean that, while scientific practice and organizational structure play a significant role in how processes need to be developed, instructors need to consider the role of the student.

It is important to consider reporting methods in user-centered design. Reporting methods changed as a result of social interaction. Scientific knowledge was found to be "constructed in a social arena," as Latour and Woolgar (1979, p.31) argue. Connors (2004) describes post-World War II changes in reports as being ordained by the type of method that best suits the purpose of the task: what Connors calls "rhetorical" in nature. Driskill (2004) describes how organizations are rhetorical in nature; recalling Flower and Hayes, (2003), the "rhetorical situation" is re-visited as one that is comprised of "reader/ audience roles, purposes, sets of proprieties, genres, sets of individuals, and temporal and technological constraints" (Driskill, 2004, p. 59). Changes in reporting methods are dependent upon user interaction, as these scholars argue.

Since the researcher projected a large amount of participants to be science and technical majors, it was important to consider literature in scientific communication. In response to the question of human involvement, Winsor's (2004) primary concern is the way that knowledge is produced by engineers. Engineers rarely write up their plans as a means to invent; instead, they treat writing as a way to transmit knowledge. For an engineer, "real" knowledge is practical and manifested in the technology that the writing is about; for engineers, Winsor concludes that the document is representation of the

technology, a mere write-up of the real thing. Winsor (2004) argues that engineers need to be aware of, but often resist, the idea that "language mediates experience" (p. 349). Winsor theorizes that most writers, but particularly technical or business writers, find a professional identity through writing in the community-at-large.

Yet what is the nature of community in technical writing? Since the majority of participants in the study were technical and science majors, it was assumed that technical writing would be important. As it stands, much technical writing consists of instructions, lab reports, and proposals -- texts dealing with pragmatic concerns, usually created in response to some sort of problem. The literature suggests that technical writing deals with how to find solutions: As Rutter (2004) explains, complicated wartime machinery required an understanding of how its processes; hence, a rise in employment opportunities occurred for technical writers in the United States. Katz (1992) argues the counter-position: That the practical purpose of technical writing -- to fulfill a need for objective goals, the "presence of a technological imperative" (p. 264) -- "would lead to an ethic of expediency" (p. 360), causing designers to lose a sense of compassion for users. Theoretical developments in this area of literature suggest that while technical writers may have been historically inclined to resist writing other than for the practical purposes, they still communicate within a community-at-large with other involved parties in design and production processes.

## **Development Across Time**

The literature suggests that professional writers exist interact with others as a community. Additionally, the researcher was concerned with how professional communication developed over time. Johnson-Eiola (2004) suggests breaking up technical communication into stages that encourage "technical communicators ... [to] negotiate and navigate social realms" (Johnson-Eiola, 2004, p. 185). Johnson-Eiola suggests that technical communicators envision themselves as "symbolic analysts" whose primary role is to "map" some form of communication plan within a collaborative setting. The stages of the plan include: Experimentation (form and test hypotheses), collaboration (delegate team member roles and facilitate feedback), abstraction (transfer learned knowledge to other processes), and system thinking (plan processes objectively from an overall perspective). Johnson-Eiola's model for communication is organized through deductive logic: That is to say, it asks users to think from specific to general terms. This model was important to the study because it helped participants to understand decisionmaking processes by informing them of the deductive nature of decision-making in professional settings. The researcher stressed the interdisciplinary aim of the project, on the assumption that participants would work in diverse environments.

Like Johnson-Eiola, Salvo (2001) is also interested in the deductive and interdisciplinary nature of professional communication. But Salvo shifts the user role from observation to participation through a user-participatory design model, which calls for mutual respect through inter- and intra-team communication (p. 279). Technical

communicators often side with designers rather than users during design and production processes, often isolating users. Salvo (2001) also argues that the user's role in the "big-picture" must be made obvious. These developments suggest that users need to be involved in communication plans and be allowed to see the big picture. For composition design and production processes, this is especially important because users are constantly faced with needing to be aware of their rhetorical situation.

Implications for Collaborative Decision Making and Composition

Knowledge through documentation and discourse. Herndl (2004) questions the industry's obsession with pragmatics in technical communication, given the emergence of technical communication as a distinct field during wartime (Rutter, 2004). Herndl uses the example of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), a reference used by the American Psychiatric Association. Since the DSM-IV is a technical manual that can be used to confirm medical diagnoses, Herndl argues that the manual constructs a form of medical discourse to explain material conditions (2004, p. 225). Essentially, users gain knowledge of the big picture through "self-discursive awareness" (p. 229): That is to say, learning the language of the discipline. Users need to be taught appropriate context of discourse (Driskill, 2004). These developments suggest that, by using technical discourse to analyze ideas, users gain a sense of empowerment.

**Appropriateness of genre and mapping.** As the first area of literature suggests, social interaction is an element of considerable importance within teams. How does social interaction translate to composition design and production? Identifying the

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appropriate usage of a technical genre is important: As Miller (1984) explains, genre "acquires meaning from ... social context ..." (p. 163) and is "pragmatic, fully rhetorical, a point of connection between intention and effect, an aspect of social action" (p. 153). Besides appropriate genre, organizational mapping -- how a process is modeled, constructed, and designed -- is also important. In an organizational communication study, Barton and Barton (2004) found that rules of inclusion and exclusion in any given organization decide whether an individual is "mapped," or given nominal credit, on a project. Barton and Barton (2004) also found that individuals tend to communicate mostly with departmental colleagues and less with other employees from other company sectors. According to these developments, *social interaction is at the heart of decision-handling for appropriate technical genre and mapping*.

Rhetorical situation and stakes. While rhetorical situation is used regarding cognitive theory (Flower & Hayes, 2003) to describe the elements of a text's communication situation, the term's usage in composition design and production lays in certain aspects of professional communication. For Driskill (2004), rhetorical situation refers to design and production processes within businesses, specifically "reader/audience roles, purposes, sets of proprieties, genres, sets of individuals, and temporal and technological constraints" (p. 59). Relying upon methods used in the field (see Latour and Woolgar, 1979 and Barton & Barton, 2004), Driskill observed and recorded written and oral communication patterns between an insurance company and its stakeholders. Stakeholders included company traders, business competitors, the Security Exchange

Commission (SEC), private organizations, and clients. Driskill found that communication between each set of stakeholders and the insurance company followed patterns reminiscent of a rhetorical situation (described above): The study concluded that A) written and oral communication took place during formal and informal meetings; B) documentation of actions was meticulously recorded in any given business deal; C) when communication between stakeholders occurred, the insurance company was seen as a mediator and D) communication between sectors of closer proximity, or between individuals with higher stakes, increased. The scholarship suggests that *users involved in high stakes communication are more aware of their rhetorical situation*.

# Topic Summary of Area 2

The following conclusions were drawn from the second area of literature, composition design and production processes:

- I. While technical writers may have been historically inclined to resist writing other than for the practical purposes, they still communicate within a community-at-large with other involved parties in design and production processes.
- II. While scientific practice and organizational structure play a significant role in how processes need to be developed, instructors need to consider the role of the student.
- III. Users need to be involved in communication plans and be allowed to see the big picture. For composition design and production processes, this is especially important because users are constantly faced with needing to be aware of their rhetorical situation.

- IV. Engaging in technical discourse empowers users by helping them to analyze ideas in collaborative settings.
- V. Social interaction is at the heart of decision-handling for appropriate technical genre and organizational mapping.
- VI. In group decision settings, users involved in high stakes communication are more aware of their rhetorical situation.

# Area 3: Communication Practices and Strategies for College Writers with ADHD

The final area of this dissertation stems from literature in communication practices and strategies for college writers with ADHD. In dealing with creating a setting where teams of writers could make appropriate decisions related to problem-solving, the researcher was faced with a problem: To what extent would college writers with ADHD understand how the knowledge, skills, and attitudes (KSA) of written/oral communication coursework that they perceived as being necessary for success be used? Moreover, to what extent would assertiveness training affect academic and professional practices?

#### Children and Adolescents with ADHD

The majority of current research on ADHD focuses on children, given its symptoms are more prevalent in youth (Children and Adults with Attention-Deficit/ Hyperactivity Disorder [CHADD], 2011; Brown, 2006; American Psychiatric Association, 2000; National Institute of Mental Health, 2009; National Resource Center

on AD/HD, 2009). Because ADHD is not considered a learning disorder but rather a behavioral disorder (DSM, 2000), existing work on learning strategies has focused on assisting organizational skills (for example, see Ratey, 2008). As a result, research on instructional strategies specific to oral and written communication has emerged (Aginsky, 2009; Cooper, 2008; Jacobson, 2009; Lienemann, 2006). The body of research described here generally describes writing to be a major area of difficulty for individuals with ADHD.

Cognitive functioning is difficult for most students with LDs, but students who have ADHD have special concerns dealing with long-term memory. Writing requires the use of executive functions (EF), which are "critical cognitive skills ... [that] may interfere with a student's ability to succeed in school" (Dendy, 2002). Working memory (WM) is the executive function that helps individuals to "[hold] facts in mind while manipulating information" by "accessing long-term memory" (Dendy, 2002); since individuals with ADHD demonstrate weaker WM, school work of children with ADHD tends to suffer since long-term memory is crucial in obtaining information for assignments. In a study comparing academic achievement results between children with ADHD and children without ADHD, grades relating to the memorization of material were lower for the children with ADHD (Aginsky, 2009). Aginsky attributes decreased ability to memorize information towards weaker WM. This scholarship speaks to the project because of the specificity of difficulties relating to task selection and usage for

individuals with ADHD: Delays in cognitive functioning cause college students with ADHD to need more time with making decisions in group settings.

EF also influences how children with ADHD use revision strategies in their writing. Jacobson (2009) conducted a study in which children with ADHD were expected to revise writing assignments. The pedagogical model used by the researcher was SRSD. The revision strategies in the study focused on complex problem-solving, an EF that is characterized by "taking an issue apart, analyzing the pieces, reconstituting and organizing it" (Dendy, 2002). The researcher assumed that writing takes places in a series of recursive, non-linear stages (Sommers, 2008), and that SRSD promotes learning through self-regulation of information that is difficult to process due to impaired EF (Graham & Harris, 2005). Using a multiple probe baseline design, the researcher compared revision practices of fourth and fifth graders with ADHD, after administering SRSD intervention. Using discourse analysis to code student essays primarily upon the incorporation of transitions, Jacobson (2009) concluded that SRSD raises students' ability to self-regulate their revision strategies.

Due to long-term memory retrieval, EF allows children to transfer learned knowledge elsewhere. Lienemann (2006) studied how children with ADHD plan, organize, edit, and revise stories. The study combined oral and written discourse:

Students were expected to write a story and then revise it following an oral presentation (storytelling) in which they were told to explain the significance of certain events. The researcher assumed that revisions would include descriptions of significance. Results

showed that, while the students were able to re-tell the story with little difficulty, their re-writing turned out to be straightforward descriptions of the events with failure to elaborate. The researcher (2006) concluded that issues with processing complex information leads to difficulty in carrying out storytelling. Besides poor content development, Lienemann also found that editing took place at the grammar and mechanics level with little to no changes. The researcher interpreted the literature to mean that, for revision strategies to be effective, college writers with ADHD need to be explicitly taught to focus on organization and structure; while generating of content is important, it should briefly introduced, then focused on at intermittent stages.

# Behavioral Issues Associated with ADHD

Instructors need to be aware of behavioral issues associated with ADHD, as they manifest in the classroom. Arguably the most apparent are impulsive behavior and poor judgment, both of which stem from weak EF. Barkley (1992) theorizes that a loss of behavioral inhibition leads to the following disruptions in executive brain functioning: Nonverbal working memory (in which ADHD individuals have defective hindsight and forethought); internalization of self-directed speech (in which they have poor self-guidance and self-questioning); self-regulation of mood and motivation (which leads to public displays of emotion and diminished self-regulation of motivation); and reconstitution, or, the ability to break down observed behaviors into new parts that can be reflected upon in new situations (in which they have limited ability to analyze and synthesize behaviors) (1992).

Warning signs of ADHD may appear in the classroom, such as being excessively upset, frustrated, or restless, can be revealed through body language (Rief, 2008, p. 100). Thus, student behaviors need to be closely observed through the imposition of a classroom management structure "that is critical to the management and success of *all* students" (p. 107).

The presence of ADHD can be further determined through errors of academic functioning such as poor listening comprehension (i.e., misunderstanding new information, trouble participating in discussion, trouble following oral instruction), unpredictable responses, poor organization, distractibility, burnout, messy papers, erratic reading comprehension, and avoidance of work (Jordan, 1998). The constant occurrence of these errors leads to a continuum referred to by the author as "emotional homeostasis," where individuals with ADHD experience failure, stress, and shame. Related to Brown's theory of executive functioning (2006), adults acquire a diminished sense of self-image, self-confidence, and self-worth.

Brown (2006), on the other hand, argues that Barkley's model overlooks emotional instability as a symptom of EF. Brown argues that executive functions work in various combinations. These combinations are grouped into: Activation, focus, effort, emotion, memory, and action (2006). Activation specifies organizing and prioritizing work tasks. Focus and effort correlate with WM and internalization of speech. Emotion deals with managing frustration and modulating emotions. Placing emotion before memory and action is key to Brown's model: Brown argues that ADHD individuals'

trouble with utilizing WM, accessing recall, and self-monitoring action is significantly impacted by emotion -- hence the impulsive outbursts typically associated with ADHD.

After examining both models, the researcher concluded that dissertation should emphasize Brown's model (2006). While both models focus on information processing, Brown's model places a greater emphasis on the influence of emotion. How do we know this? Hyperfocus on early stages of higher order cognitive activities leads to ineffective time management and troubles with "prospective memory" (or, remembering to remember) (Tuckman, 2006). The researcher interpreted the literature to mean that difficulties with memory can lead individuals with ADHD to become emotional detached from tasks.

#### Adults with ADHD

Why is adulthood ADHD an issue of which instructors should be aware? Let us recall the NIMH-funded conducted at Harvard University, which found that an estimated 4.4% of adults ages 18-44 in the United States have ADHD (Kessler, 2006). Even though students with ADHD may make up a small percentage of students, it is the point of this dissertation to suggest a universal design, one that may be used amongst most populations.

Universal Design for Learning (UDL) is a term designated for pedagogical use that does not limit curricula to specific LDs but promotes learning for most individuals. UDL refers not "to a single optimal solution for everyone, but to the need for multiple approaches to universally meet the needs of diverse learners" (Cooper, 2008, p. 176).

Special accommodations have potential to work well with everyone, regardless of having ADHD or not. For instance, Cooper (2008) argues that emotional supports, explicit directions, peer workshops and conferences, and reflective writing are effective writing strategies for every student.

Adults with ADHD have difficulties distinct to their age. While an adulthood diagnosis is difficult to acquire (National Resource Center on AD/HD, 2009); CHADD, 2011; Beck, 2010), of even more of significance to instructors is the issue of adaptation. Adults with ADHD have difficulties with success associated with entry into a new educational setting, as well as lack of awareness -- as adults, college students with ADHD and other disorders are expected to independently seek assistance (Stewart, Nilson, & Norungulo, 2010; Kelly & Ramundo, 1993). Tuckman (2006) asserts that the newfound independence of post-adolescence is difficult for most college students, but is especially difficult for adults with ADHD who are expected to instantly adapt to a rigorous set of professional and academic expectations. Of concern with this study was the observation that adults with ADHD have certain challenges at school and work.

Edwards (2005) studied the cognitive processes and writing products of students with LD. The study focused on planning, monitoring, and revising strategies. Using think-aloud protocols, written essays, and videotapes, the study was modeled after protocol analysis method used by Flower & Hayes, whom Edwards cites to conclude that student writers can use think-alouds—when students vocalize the steps to solving a problem to themselves and to others—as part of their revision strategies (Edwards, 2005).

Findings concluded that skilled writers engage in more elaborate process of constructing problems by reflecting on their attention to the purposes and goals of writing (Edwards, 2005). The study revealed that experienced writers make substantive changes in plans while translating mental or written notes to written sentences; less skilled writers treat revisions as an editing task. The researcher interpreted the literature to mean that writers with LDs and ADHD produced papers which tend to be shorter, less organized, and less developed.

Cognitive processes are essential in understanding how college writers with ADHD produce written work. Cooper (2008) interviewed ten college students with ADHD to explore their difficulties with writing. Cooper concluded that EF needs to be considered in future models of instruction, since EF explains complex and contradictory symptoms. For instance, ADHD individuals with hyperactivity subtype tends to be less hyperactive in adulthood, with more difficulty in concentration (Cooper, 2008; Tuckman, 2006). That is to say, while *individuals with inattentive subtype retain inattentiveness well into adulthood, individuals with hyperactive subtype tends to lose their hyperactivity as adults but retain inattentiveness*.

While thesis findings reviewed here constitute research within oral and written communication courses, there is evidence to suggest that these findings are consistent elsewhere. For example, Tuckman (2006) demonstrates that adults with ADHD suffer from psychological functioning related to self-image and self-efficiency: Since part of being a responsible adult means making the right choices, adults with ADHD are judged

negatively for making bad choices. Accordingly, children with ADHD tend to be more closely managed and monitored by their peers, parents, and teachers, so transitioning into the independence of adulthood impedes their development. Symptoms of ADHD can occur well into adulthood, even with medication (Safren, Otto, Sprich, Winett, Wilens, & Biederman, 2004).

Jordan (1998) presents a varied set of negative perceptions of individuals with ADHD, including: Impatience, talkativeness, aggressiveness, distractibility, inability to listen, poor judgment of character, inability to finish tasks, impulsiveness, disorganization, insatiability, inability to remain focused, and immaturity (1998). This list confirms negative public perceptions of ADHD (Johnson & Denham, 2003; Chan, 2006). Considering the public negativity associated with ADHD, instructors need to be properly informed of determining the presence of the disorder.

Defense mechanisms are part of interpersonal communication: Tuckman (2006) brings up the example of playing the victim of circumstances. Studying ADHD in adults is truly an issue of communication: These individuals preemptively keep their distance or assume the worse, which becomes self-fulfilling prophecy. Tuckman (2006) attributes self-fulfilling prophecy to individuals with ADHD (2006), as do Lavoie (1990), Lavoie & Domenech (2005), Lavoie & Wirzburg (2008), and Barkley (1994). Adults with ADHD wait until the last minute to do things, thinking they are going to be judged for the worse anyway. Their friends view them as flighty and difficult to be around (Tuckman, 2006).

The researcher determined that occupational functioning—the processes by which an individual peforms activities in professional settings—links the three major areas of literature, given its academic and professional aspects. Tuckman (2006) argues that adults with ADHD suffer from a "double bind" -- either they accept jobs that are below their abilities or or risk further failure at the higher level jobs where they could be more successful. Tuckman (2006) cites statistics in which adults with ADHD are more likely to have been fired and/or quit impulsively from jobs. Tuckman (2006) attributes this pattern to the notion that the behavior of adults with ADHD may be difficult for co-workers to tolerate. A possible solution may be to have an assistant manage details that often elude adults with ADHD. In particular, adults with ADHD suffer from learned behavior relating to childhood escape: "pseudoefficiency" -- completing lower priority tasks first due to feeling intimidated of higher priorities , and "juggling" -- jumping to new, more exciting projects (Tuckman, 2006, p. 72).

To summarize these findings, occupational functioning of adults with ADHD is especially affected within collaborative settings. The success of individuals in managing tasks in collaborative settings in dependent upon occupational functioning. Recent dissertations on college students with ADHD did not focus on occupational functioning; Therefore, the current project strove to understand how academic and professional practices of college writers with ADHD, and how these practices could be implemented into curriculum construction.

# **Instructional Tools and Strategies**

Encouragement can undoubtedly be used to help all students, not just those with ADHD. What can instructors do to encourage their students? Rief (2008) has developed several checklists for instructors and parents. A list of classroom expectations for students with ADHD includes: A structured, positive environment that fosters open communication, a feeling of confidence that their instructor cares about their success, clarity of expectations, lessons that incorporate modeling and teacher-guided interaction, and predictability of schedules and routines (Rief, 2008, pp. 92-93).

Guidelines. Instructional guidelines for teachers include: Establish a clear routine with a plan that can be communicated in writing and verbal explanation, concrete definitions of desired objectives, specific and descriptive feedback, redirection to a different activity or situation in order to promote instructional variety, and work contracts. Conflict resolution skills need to be taught early on (Rief, 2008, pp. 94-99).

Rief (2008) also suggests ways to prevent behavioral problems, such as:

Controlling proximity during teacher-student interaction, modeling respectful language, tone, and body posture, carefully assigning peer partners, preparing for unstructured activities like class discussions with written and oral transitions, and immediately directing students to warm-up activities (pp. 100-103). Rief (2008) stresses that it is important to pace instruction to avoid boredom and frustration, and providing a cooling-off period for students who are becoming aggravated or angry (pp. 100-103).

The guidelines noted here may be reached through a combination of team work and ample times for recognition in the classroom. A study on teaching listening skills during oral activities (Adams & Cox, 2010) found that students who were given several public speaking opportunities throughout the term led to more favorable classroom communication not only in front of groups, but more confidence in speaking to the instructor about ideas for research papers later in the term. The same study also found that group presentations led to improved delegation of work groups (Adams & Cox, 2010), which suggests that team members need to be taught the delegation of roles in work groups (Johnson, 2004; Paton, 1995). Adams and Cox (2010) concluded that active listening needed to be taught as a separate skill of its own. Active listening—a method of listening that promotes mutual understanding by requiring participants to respond a speaker—may be implemented through instructor-guided note-taking. The researcher interpreted this literature to mean that *college students with ADHD would greatly benefit from activities which focus on active listening and working in teams*.

Think-Alouds. Student writers can use think-alouds (Edwards, 2005) to improve EF through recall of strategies used to complete an assignment. Instructors improve ADHD students' tendency to juggle tasks (Tuckman, 2007) by requiring structure through time calendars and deadlines: Giving earlier assignments with calendars with lower value grades can be used to prepare students for later in the term, when similar assignments with higher value grades can be assigned later. Howard (2000) offers similar advice on structuring work groups, as do Lunsford and Ede (1990; 2001).

Levels of Questioning. Bloom's levels of questioning, created in 1954, is a popular method used by instructors to engage critical thinking. College writers with ADHD can use the different levels of cognitive operation within Bloom's taxonomy by proposing test questions using performance verbs. This can be a helpful peer review exercise during test review days. The following list of performance verbs, adapted from Nilson (2010, p. 24) can be used by instructors and students alike to create test review questions:

- Knowledge: Define, memorize, summarize
- Comprehension: Translate, listen, explain
- Application: Apply, use, paraphrase
- Analysis: Compare, relate, contrast
- Synthesis: Propose, plan, re-write
- Evaluation: Present, defend, critique

Integrating Bloom's taxonomy for college students requires focusing on the higher levels (analysis, synthesis, and abstraction), due to the advanced expectations of college coursework; college instructors expect students to write highly analytical papers and communicate effectively in collaborative settings (Wineburg and Schneider, 2010). Following this line of thought, the authors argue that Bloom's taxonomy is upside-down for HE: "Our concern is about Bloom in practice — the way that the Taxonomy takes on a life of its own. Pyramids, after all, are images that point in one direction. Placing

knowledge at the bottom often sends the wrong message" (2010, p. 57). The style of learning students are accustomed to before college need to facilitated in college to focus on the higher levels of Bloom's taxonomy. CSIW utilizes abstraction by teaching students to incorporate knowledge in different contexts (Graham & Harris, 2005; Hallenbeck, 2002).

Instructional tools and strategies need to be decided upon at the discretion of the instructor. Whenever possible, *classroom space should be utilized to encourage* communication between instructor and students. Critical thinking takes place when the responsibility of learning is placed in the students' hand.

Assertiveness Training. The study in this dissertation used assertiveness training to understand college writers' perceptions of writing, as well explore their academic and professional practices relating to team work. The researcher relied upon a combination of methods that are used in assertiveness training. These methods of assertiveness training differed: Curtet (2003) offers an audio guide, Paterson (2003) offers a paperbound book, while Ward & Holland (1993) offers a spiral-bound book. All of these methods include printable handouts, opportunities to write based on critical reflection moments, and checklists. For this study, the beneficial aspects of each approach were combined.

Paterson's *Assertiveness Workbook* (2000) details assertiveness training as one of understanding and controlling the client's ability to stand up for herself and get her message across in a clear manner. Understanding assertiveness as the goal of reversing passive, aggressive, and passive-aggressive communication styles, users learn to control

negative behaviors and engage with the world using a skills set of psychological techniques (Paterson, 2000). Teaching assertiveness is important because users use the skills they already have and learn to develop them on their own (Cooper, 2007; Frankel & Feinburg, 2002; Paterson, 2000; Sorenson and Commodore, 1995).

Assertiveness training is a technique used by therapists to manage ADHD, and is used with clients as an alternative to or in combination with a medication behavioral modifier (Paterson, 2000). As Sorenson and Commodore note in "Social Skills Training for Children with ADHD" (1995), teaching assertiveness to therapy clients falls under other types of social skills lessons such as self-expressive skills, other-enhancing skillsthat is to say, skills used to learn more about the other person—, and communication skills (p. 1). The authors define assertiveness training as "making simple requests, disagreeing with others, [and] denying unreasonable requests" (Sorenson & Commodore, 1995, p. 1). DuPaul and White (2004) suggest two types of behavioral interventions for ADHD: Classroom and schoolwide. The researcher found that assertiveness training would be useful as a classroom behavioral intervention: One involving "systematic changes to antecedent events—activities occurring prior to a target behavior—or consequent events —activities that follow a target behavior" (DuPaul & White, 2004). Assertiveness training was used in this way to measure how participants responded before and after writing exercises.

Assertiveness training parallels the writing process in many ways discussed in this literature review, including classroom management, work-shopping papers, and

monitoring discussions. Paterson (2000) explains the importance of giving *and* receiving feedback as techniques contributing to the empowerment of the individual. The discipline and structure that students learn in the composition classroom correlates with the analytical skills that will help them in college and beyond; in turn, the writing process taught in the composition classroom has a definitive relationship with assertiveness, since clearly getting the message across is such an important concern for learners with ADHD.

The current project considered ways that assertiveness training could be useful in the classroom. Sorenson and Commodore (1995) suggest that social skills training use the following progression: Instruction, modeling, behavioral rehearsal, coaching, and feedback. To test the intervention, each stage was facilitated in reference to the components of executive functioning as determined by Brown (2005): Activation, focus, effort, emotion, memory, and action. An independent "homework assignment" was administered to participants in which they practiced the self-monitoring process: Identify the problem, develop solutions, select a solution, take action, and evaluate the solution and its consequences (Sorenson and Commodore, 1995, p. 2).

Opponents of the methods discussed here would argue that collaborative classroom activities have drawbacks. For instance, overuse may lead to "labor-intensive training sessions" (Peterson, 2001, p. 61). Likewise, various avenues of peer response are necessary but may not be possible due to certain environmental restrictions (Ching, 2007). Peterson (2001) argues that group sessions can be substituted for structured self-assessment exercises, which "significantly [reduces] tutor contact time in an

overburdened time-table [without having] a negative impact on students' diagnostic abilities" (p. 61). While these drawbacks are certainly possible, they can be avoided of instructional strategies are varied and flexible enough to allow for outlets.

To summarize, assertiveness training offers the benefits collaborative scenarios, including critical thinking and self-directed learning, by helping writers consider how writing appears within a communication-based context -- that is to say, a text's rhetorical situation.

# Topic Summary of Area 3

The following conclusions were drawn from the third area of literature, communication practices and strategies for college writers with ADHD:

- Delays in cognitive functioning cause college students with ADHD to need more time with making decisions in group settings.
- II. For revision strategies to be effective, college writers with ADHD need to be explicitly taught to focus on organization and structure; while generating of content is important, it should briefly introduced, then focused on at intermittent stages.
- III. Difficulties with memory can lead individuals with ADHD to become emotional detached from tasks.
- IV. Adults with ADHD have certain challenges at school and work.
- V. College writers with ADHD have been found to produce papers which tend to be shorter, less organized, and less developed.

- VI. Regardless of hyperactivity subtype, inattentive subtype, or both, adults with ADHD tend to retain inattentiveness, which can potentially lead to academic and professional difficulties.
- VII.Occupational functioning of adults with ADHD is especially affected within collaborative settings. The success of individuals in managing tasks in collaborative settings in dependent upon occupational functioning. Recent dissertations on college students with ADHD did not focus on occupational functioning.
- VIII.College students with ADHD would greatly benefit from activities which focus on active listening and working in teams.
- IX. Collaborative instructional strategies should be varied and flexible enough to allow for outlets.
- X. When planning collaborative classroom settings, classroom space should be utilized to encourage communication between instructor and students.
- XI. Critical thinking takes place when the responsibility of learning is placed in the students' hand.
- XII.Assertiveness training offers the benefits collaborative scenarios, including critical thinking and self-directed learning, by helping writers consider how writing appears within a communication-based context -- that is to say, a text's rhetorical situation.

# Summary and Conceptual Framework

# Overall Summary of Literature

The literature reviewed in this chapter yielded several important points that informed the study. The *first* area of literature (task selection and usage in collaborative settings) suggests that CSIW (cognitive strategy instruction in writing) helps students to understand the rhetorical situation of texts, and develops goal-setting and time management skills. The *second* area of literature (composition design and production processes) suggests that social interaction is at the heart of decision-handling; furthermore, users involved in high stakes team decisions are more aware of their rhetorical situation. The *third* area area of literature (communication practices and strategies for college writers with ADHD) suggests that, while several methods already exist for college students with LDs and ADHD, the current project brings something new to the table by suggesting that assertiveness training, which uses draws from the current methods, can be used to encourage critical thinking by teaching students to be direct, concise, and logical in their writing.

A gap in the literature was demonstrated: While dissertations about college writers with ADHD describe the usefulness of group work, few closely studied how decision-making occurs amongst this population. While previous research (Cooper, 2008) discusses the rhetorical situation for college writers with ADHD, a gap in the research also exists when considering how group decision-making makes necessary awareness of rhetorical situation. It is hoped that the literature reviewed in this chapter is useful for

further research in the improvement of collaborative pedagogies in teaching communication across the disciplines.

# Conceptual Framework

Following Bloomberg and Volpe's model (2008, p. 61), the conceptual framework described here informs the methodological design of the research process. Following this section is the same conceptual framework in outline form. Readers may refer to the section entitled "Research Questions" in the first chapter for cross-reference.

The first research question seeks to determine the extent to which participants perceived they were prepared to participate in peer writing workshops. Therefore, the logical conceptual category to capture responses to this question was determined to be "Preparedness for peer writing workshops."

The second research question seeks to determine the extent to which participants perceived they were prepared to communicate appropriate feedback at school and work. Therefore, the logical conceptual category to capture responses to this question was determined to be "Preparedness for communicating appropriate feedback at school and work."

The third research question seeks to understand what participants thought they needed to know and how this knowledge was applied to other coursework. Therefore, the logical conceptual category to capture responses to this question was determined to be "Development of KSA (knowledge, skills, and attitudes) necessary for success in writing courses."

The fourth research question seeks to evaluate communication in collaborative settings between major-specific coursework and general education writing/communication coursework. Therefore, the logical conceptual category to capture responses to this question was determined to be "Application of KSA for effective professional communication in major-specific coursework versus general education writing/communication coursework."

The fifth research question seeks to determine the usefulness of assertiveness training. Therefore, the logical conceptual category to capture responses to this question was determined to be "Impact of assertiveness training intervention on group and professional communication skills."

Following is the same conceptual framework in outline form:

- I. Preparedness for peer writing workshops
  - A. Very prepared
  - B. Unprepared
  - C. Somewhat prepared
- II. Preparedness for communicating appropriate feedback at school and work
  - A. Very prepared
  - B. Unprepared
  - C. Somewhat prepared

- III. Development of KSA (knowledge, skills, and attitudes) necessary for success in writing courses (what they think they needed and how knowledge was applied to other coursework)
  - A. Knowledge of content; learning to effectively write and collaborate with others
  - B. Transference of content; applying skills learned in writing/communication coursework to other coursework
- IV. Application of KSA for effective professional communication in major-specific coursework versus general education writing/communication coursework (applying what they learned to the workplace)
  - A. Transference of content; applying KSA of professional communication from major-specific coursework to the workplace
  - B. Transference of content; applying KSA of professional communication from general education writing/communication coursework to the workplace
- V. Impact of assertiveness training intervention on group and professional communication skills (usefulness of assertiveness training)
  - A. Knowledge of content; explaining and defining KSA of assertive communication
  - B. Transference of content; applying assertive communication to school and work

#### **CHAPTER 3**

#### RESEARCH METHOD

The purpose of this multiple case study was to explore a sample of college writers' with ADHD perceptions on difficulties with their writing, as well as to evaluate an intervention which utilized communication-based classroom scenarios. A pilot was performed, which was followed by a larger study. The intervention focused on assertiveness training (Cooper, 2007; Holland & Ward, 1990; Messer, 2010; Paterson, 2000; Sorenson & Commodore, 1995; Tuckman, 2007), a phenomenon which the researcher believed would improve the writing of college writers with ADHD.

This chapter describes the study's research method by discussing the following areas: A) rationale for research approach; B) research sample; C) overview of research setting; D) research design overview; E) data collection methods; F) data analysis and synthesis; G) ethical considerations; and H) issues of trustworthiness.

### Rationale for Research Approach

Although this study includes quantitative instruments, the majority of data were collected and interpreted qualitatively. Meeting multiple times for extensive interviews with each participant allowed the researcher to obtain an in-depth understanding of the phenomena under study (Bloomberg & Volpe, 2008). A qualitative approach was

essential for this study, since it required becoming acquainted with each participant's communication styles over the span of 5 weeks.

To reduce "the likelihood of misinterpretation," it was necessary to consider "redundant" data: That is to say, the repetition of select information (Bloomberg & Volpe, 2008, p. 72). Doing so enabled more accurate interpretation of findings. During the course of the study, participants filled out forms and answered interview questions related to their answers. Bloomberg and Volpe (2008, p. 11) point out that case-study research "involves a detailed description of a setting and its participants, accompanied by an analysis of the data for themes, patterns, and issues." The strategy of inquiry used, multiple case study, allowed for a rich amount of data to be collected, especially given the relatively small number of participants (n=2 in pilot, 8 in larger study). The necessity to compare such an abundance of data on a meaningful level required having a small number of subjects which would allow for "extensive and prolonged engagement to develop patterns and relationships of meaning" (Bloomberg & Volpe, 2008, p. 11).

#### **Brief Overview**

The study focused on the writing experiences of ten Clemson University students with ADHD. As a means to help participants understand the importance of group communication in school and at the workplace, participants engaged in mini- writing workshops, lessons, and interviews revolving around group and professional communication. The intervention of assertiveness training was introduced, taught, and reflected upon by each participant over the span of five weeks. A pilot study was

conducted during February-March 2011 to identify issues and barriers for the larger study, which was conducted March-June 2011.

# Research Sample

Criterion sampling<sup>3</sup> was used to select this study's sample. Students from Clemson University were selected based on the following criteria:

- Students had to 18 years of age or over.
- Students had to have been previously or currently enrolled in a college writing course.
- Students had to have documented evidence of ADHD.

The site of the study was Clemson University in Clemson, South Carolina, and the study took place during the Spring, Summer, and Fall semesters in 2011. Each of the ten participants met with the researcher at four individual sessions. While the majority of sessions took place in primarily in classroom settings, certain sessions took place in the campus's student lounge during free times. Care was taken to reduce and/or eliminate environmental distractions.

A time frame of 5 weeks was decided on by the researcher to ensure an adequate amount of time to become acquainted with the participants, teach the principles of the intervention, and allow time for participants to apply the learned skills set at school and work. To maintain confidentiality, Student Disability Services (SDS), a university sector

<sup>&</sup>lt;sup>3</sup> Criterion sampling is a type of "purposive sampling strategy," allowing the researcher to gain insight and understanding from participants based on specific criteria (Bloomberg & Volpe, 2008, p. 191)

which helps students with documented disabilities obtain accommodations, invited students with ADHD to contact the researcher. Participants were chosen from the pool based on scheduling availability.

# Overview of Research Setting

#### Contextual Information

Clemson University is a land-grant institution located in upstate South Carolina.

Clemson has a variety of major fields of study; consequently, the majors of the participants in this study ranged from psychology, biology, marketing, finance, accounting, and engineering.

Writing courses are an important area to consider, since they are core to all majors at Clemson. Accelerated Composition, English 103 is a course that undergraduates at Clemson take to fulfill their writing requirement, and combines the composition and literature course combination requirement that may be fulfilled at other institutions such as community colleges. Additionally, students are required to take a 200-level survey course in British or American literature and 300-level advanced writing course (usually Technical Writing or Business Writing). Advanced courses are taken at the sophomore and junior levels, although students may take the courses any time before they graduate. One participant was enrolled in English 103 at the time of the study, while the rest had already taken and passed their writing courses; one participant reported taking English multiple times before passing. All subjects reported having difficulties with writing.

# Demographic Information

This section profiles the demographics of each participant for identification purposes. Names have been changed to preserve anonymity. See Figure P below:

Figure P. Participant demographic chart.

Pseudonym $n=10$	Age in Years During Time of Study & Gender  M=Male F=Female	Race	Major	into Clemson out of high school	·
Rachel	21/F	Caucasian	Psychology	T/3 <sup>rd</sup>	P
Sam	23/M	Caucasian	Biology	H/8 <sup>th</sup>	P
Avery	18/F	Caucasian	Psychology	H/2 <sup>nd</sup>	L
Libby	29/F	Caucasian	Special Education	T/4 <sup>th</sup>	L
Tanya	19/F	Caucasian	Accounting	H/4 <sup>th</sup>	L
Connie	21/F	Caucasian	Marketing	H/8 <sup>th</sup>	L
Alima	22/F	Caucasian/ Latina	Major	T/6 <sup>th</sup>	L
Keira	21/F	Caucasian	Marketing	T/4 <sup>th</sup>	L
Mike	19/M	Caucasian	Animal & Veterinary Sciences	H/5 <sup>th</sup>	L
Dan	22/M	Caucasian	Civil Engineering	H/9 <sup>th</sup>	L

# Perceptual Information

Students' perceptions of what they needed to know and how they went about obtaining what they needed to know to become better writers was essential to the study. The researcher was particularly interested in how feedback was perceived and given during writing workshops; how feedback influenced the revision of drafts; whether participants had a shift in attitude toward written, group, and professional communication following assertiveness training; participants' communication practices in general education writing/communication coursework and major-specific coursework, and the transferability of these practices to the workplace; whether a constancy of purpose in argumentative writing correlated with assertiveness; and which elements of assertiveness training the participants found to be most useful.

#### Theoretical Information

The areas from which research questions developed for this dissertation included:

Task selection and usage in collaborative settings; composition design and production

processes; and communication practices and strategies for college writers with ADHD.

Because the doctoral program from which this dissertation is based is interdisciplinary,
these areas were developed from faculty across several disciplines: Communication

Studies, English, and Student Disability Services (SDS).

An ongoing review of the literature provided the theoretical grounding for the study. Graham and Harris (2005) addressed peer writing workshops, feedback, and overall success in writing courses (as addressed in research questions 1-3) as they relate

to students with learning difficulties. Interview, inventory, and direct observation were the methods used to obtain information needed to answer the first three research questions. Tuckman (2007) and Paterson (2005) addressed workplace communication and assertiveness training (as addressed in research questions 4 and 5). Interview, role play, and document review were the methods used to obtain information needed to answer the last two research questions.

# Research Design Overview

This section describes data-collection methods and the process used to carry out the research. The section that follows describes the process of data collection in greater detail.

- Research was conducted to compile a literature review of the areas discussed in the project. This research was drafted and approved by a committee of professors via an interdisciplinary prospectus.
- 2. Following the defense of the prospectus, the researchers acquired IRB approval to conduct the study. The IRB approval process required outlining the steps of the study, including the compilation of documents and research leading to approval to work with human subjects for pedagogical purposes.
- 3. Potential research participants were identified through SDS and were asked to contact the researcher. Potential participants were then contacted by email, and those who agreed to participate within approved time periods were emailed acceptance notices.

Participants were contacted by telephone and email one week prior to meeting with the researcher. As an incentive for participation, participants were given a \$50 giftcard to their choice of Wal-mart or Target.

- 4. A pilot study (February 2011) was undertaken to determine the usefulness of the data-collection instruments. Modifications that occurred between the pilot and larger study (March-September 2011) included streamlining handouts and verbal explanations for the purpose of clarifying relationships between ADHD, writing, and assertiveness training.
- 5. Participants met individually with the researcher for four sessions over the span of five weeks. Each session represented a phase of the data collection.

# **Data Collection Methods**

Each participant went through three 90-minute in-person individual training sessions (scheduled one week apart) and one 30-minute in-person follow-up session (two weeks after the last training session). Each session was recorded in order to maintain transcripts and compare notes for accuracy. As per IRB requirement, recordings were securely destroyed after the study.

# Phase 1: Interview and Inventory<sup>4</sup>

During the first session, the participant signed and received a copy of an informed consent form (Appendix B), answered a pre-assertiveness inventory (Appendix C), was interviewed on group communication, professional communication, and ADHD (Appendix D), was introduced to the study and the concept of assertiveness through the use of instructional handouts prepared by Holland and Ward (1990) (Appendix A), and was assigned a take-home writing assignment (Appendix E). The take-home writing assignment, which consisted of a short argumentative essay, description of behavior types (Appendix A), and identification of different behaviors (Appendix A), took 60 minutes to complete. Participants were told that they would be drafting this essay throughout each phase of the study. Participants were given a "rights charter" on assertiveness (Appendix A: Handout I) and asked to study it as preparation for the next phase. The participant was given a chance to ask questions and/or make comments about the study.

The interview method was chosen for the study because it "has the potential to elicit thick, rich descriptions" (Bloomberg & Volpe, 2008, p. 82). The inventory method was chosen for this study because it allows for comparison at several times during the study; in addition, administering one inventory (i.e., without comparison) prepares participants to transition into the next learning activity (Graham & Harris, 2005).

<sup>&</sup>lt;sup>4</sup> In this study, inventory refers to an aggregate of results obtained through brief surveys and questionnaires. Participants completed inventories to gain an understanding of assertiveness

Phase 2: Interview, Direct Observation, Inventory, Role Play, and Document Review

During the second session, the participant reviewed the take-home writing and handouts with the researcher (including a description of writing and communication scenarios), went through assertiveness training exercises by going through role play and a toolkit of assertiveness skills, did a mock workshop with the researcher in which assertiveness was correlated with writing, was encouraged to follow through with learned skills at school and work, and was assigned a revised draft of their writing. The take-home writing assignment took 45 minutes to complete. The researcher modeled assertive behavior for the participant by drawing a three-column chart on a whiteboard, with each column labeled "situation," "feelings," and "desired assertive behavior." Participants received a handout referring to assertive body language and a toolkit of assertive skills (see Appendix A, respectively Handouts F and G). The participant was given a chance to ask questions and/or make comments about the study.

Direct observation was chosen for this study because it allows researchers to study "the social dynamic of the setting [and] how [participants] respond or react to various experiences" (Blakeslee & Fleischer, 2007, p. 110). Role play was chosen for this study for two reasons: As a means to actively engage writers' interest during mock writing workshops (Villanueva, 2003), as well as apply this especially effective technique for students with learning difficulties as means to engage multiple intelligences (Gardner 2003; Gardner, 2009; Graham & Harris, 2005). Document review was chosen for this study for the purpose of comparing changes between drafts (Blakeslee & Fleischer,

2007); document review is also important because it "facilitates discovery of cultural nuances" (Bloomberg & Volpe, 2008, p. 195).

Phase 3: Interview, Participant Observation, Inventory, Role Play, and Document Review

During the third session, the participant reviewed the take-home writing with the researcher (including a description of writing and communication scenarios), was asked if he or she followed up on assertiveness training exercises from the previous session, was given a writing process inventory checklist to fill out, did a mock workshop with the researcher in which role play through specific aspects of assertiveness training was applied, was encouraged to follow through with learned skills at school, and was assigned a revised write-up. The take-home writing assignment took 30 minutes to complete. The handouts used were based on modeling a request (Handout L), self-respect (Handout M), receiving criticism (Handout N), and giving criticism (Handout O) (See Appendix A for these handouts). The researcher took notes on responses during the mock workshop. The participant was given a chance to ask questions and/or make comments about the study.

Phase 4: Interview, Document Review, and Inventory

During the fourth session, the participant reviewed the take-home writing with the researcher (including a description of writing and communication scenarios), filled out a post-assertiveness inventory, discussed comparisons, and interviewed on the extent of the assertiveness training used in academic and professional communication settings.

Participants were given a chance to suggest improvements and areas for strength for the study. At the end of the final session, the participant was given a gift card (\$50 for their

choice Target or Wal-Mart) for their participation. The participant was given a chance to ask questions and/or make comments about the study. See Appendix F for the post-inventory.

## **Data Analysis and Synthesis**

The researcher collected approximately 400 pages of data from meeting with the participants. To make sense of this information, it was necessary to identify significant patterns that would answer the research questions proposed at the beginning of the dissertation. Data analysis and synthesis took place simultaneously throughout the research process: While this complicated data collection, it was also expected, given the fact that the population were individuals with disabilities. As Hartley and Muhit (2003) point out, use of qualitative research method is appropriate for populations with disabilities because it provides the opportunity to "listen and include the voices" in a research context (p. 108). The nature of this research was complex, and analysis and synthesis of data took place in a "nonhierarchical context" (Ryan, Anas, & Gruneir, 2006): That is to say, assertiveness training would yield a flood of information that needed to be simultaneously analyzed and synthesized. The researcher frequently communicated with the investigators during analysis and synthesis.

The formal process of data analysis and synthesis began by assigning alphanumeric codes to significant patterns within the data. These codes, which are included in a coding legend as Appendix G, were formed from the descriptors and

categories of the conceptual framework.<sup>5</sup> The researcher took notes and recorded meetings with the participants. Following meetings, the researcher transcribed recorded communication between himself and the participants. Patterns within the transcriptions were identified using the descriptors and categories of the conceptual framework, which is described in chapter 2. These patterns were then moved into data summary tables, which appear as figures in Appendix H. (Data summary tables have been intentionally left blank and pseudonyms have been replaced with letters; this is to preserve anonymity and ensure confidentiality of the participants.) The researcher used direct quotations from the participants that he felt compared to the descriptors.

Before reporting and analyzing the data, the researcher needed to ensure accuracy of results. Accuracy was accomplished through use of inter-rater reliability testing, or intercoder reliability, by sharing data samples with individuals who were not associated with the research team. Holsti's (1969) formula of intercoder reliability yields a simple percentage of agreement between two coders; the researcher followed the example of other publications (Aginsky, 2009; Cooper, 2008; Edwards, 2005; Jacobson, 2009; Lienemann, 2006) by using intercoder reliability. In this regard, the plan was to produce data samples free of identifying information and distribute these samples amongst two individuals who were not associated with the IRB-approved research team. The IRB was consulted during this time, who confirmed that these instructors were not considered engaged in human subjects research and would therefore not need to be added to the

<sup>&</sup>lt;sup>5</sup> Readers may refer to Appendix G for full definitions of the descriptors.

protocol. The purpose was to verify the validity of coded data by removing bias that could result if the research team were doing the testing. Two writing instructors were asked to do an independent analysis of the data that the researcher collected, but did not receive identifiable data. Instructors were given \$25 Visa gift cards as compensation. The writing instructors analyzed 10% of the data (approximately 40 pages). Results of the intercoder reliability are discussed in the following chapter.

Overall, the researcher analyzed and synthesized data according to a process described by Bloomberg and Volpe (2008) as cross-examination. Essentially, the data was cross-examined by being fragmented into the different categories of the conceptual framework and then synthesized by reconstructing a holistic and integrated explanation. Based upon analysis and synthesis, the researcher was able to produce several conclusions and develop recommendations.

### **Ethical Considerations**

The researcher considered and took heed of all the issues involved in working with human subjects. Following a rigorous process of institutional review, IRB approval was attained. Participants were given an informed consent form (see Appendix B).

According to Bloomberg and Volpe (2008, p. 85), "the research process involves enlisting voluntary cooperation, and it is a basic premise that participants are informed about the study's purpose." Consequently, participants were given opportunity to ask questions and/ or express concerns throughout the duration of the study. While no ethical threats were

posed, safeguards were nonetheless established to protect the rights of participants and ensure confidentiality.

### **Issues of Trustworthiness**

Evaluating issues of trustworthiness in qualitative research differ from those in quantitative research, since qualitative research focuses on "how well the researcher has provided evidence that his or her descriptions and analysis represent the reality of the situations and persons studied" (Bloomberg & Volpe, 2008, p. 77). Thus, the accuracy of the study depends upon the quality of evidence that is provided. This section uses qualitative terminology -- *credibility, dependability, and transferability* -- to provide such examples of evidence.

### Credibility

There is always the possibility of bias in qualitative research, given its subjective nature. Reflective field notes were recorded throughout the study. Repeated and substantial involvement with participants' writing samples took place to facilitate an indepth understanding of the ADHD and the writing process. Participants were asked the same questions often to compare responses. Multiple sources of data, including writing samples, inventories, and worksheets to ensure validity of interpretations; multiple methods also enhanced the methodological validity of the study.

Discrepant findings were found throughout the study. For example, one of the pilot study participants noted that "people with ADHD need a lot more than assertiveness

to help them." While this statement did not discredit the study, it necessitated the need to clarify to future participants that assertiveness training may have a correlation with the writing process. While this finding challenged the researcher's initial expectations, it was an important issue proving the need for a pilot study (which was not found in similar studies).

To ensure that the researcher's own biases did not influence how participants' perspectives were portrayed, the researcher asked participants to re-state responses for the sake of objectivity and clarification. The dissertation chair periodically met with the researcher to examine field notes and ask questions when necessary.

### Dependability

With prior arrangement, data can be made available for review by other researchers. All communication in the study between participants and researchers were audio recorded, and email was used to track communication. Following the transcription of sessions and field data, investigators associated with the study were asked to code several interviews in order to establish inter-rater reliability. Consistency between raters reduced the "potential bias ... [of a] single researcher" (Bloomberg & Volpe, 2008, p. 78).

### Transferability

This term refers to "the fit or match between the research context and other contexts as judged by the reader" (Bloomberg & Volpe, 2008, p. 78). While it may not be

possible to replicate results exactly, the study can be made possible with similar processes.

Detailed descriptions of data were included in the analysis and synthesis portion of the write-up. The use of interviews and verbal feedback to inventory responses ensured that detailed description would occur. Especially during the pilot, participants contributed positive feedback to the overall study: For example, Sam said that the experience with being assertive was "enjoyable" and "could be useful" in "presenting counter-arguments" in writing.

The context of this study may be of interest to readers. Given the expectations of individuals with ADHD, such as excessive talking and difficulty in multitasking, participant observation played an interesting role in describing the behaviors of the participants. For instance, Rachel was very willing to contribute information, so some sessions went over time due to her desire to describe situations from multiple perspectives; similarly, Sam arrived late to several sessions and, while claiming he was "good at multitasking" during Phase 1, still required repetition of several questions due to texting on his phone. Findings such as these were deemed by the researcher to be transferable in similar studies.

## **Chapter Summary**

In summary, this chapter provided a detailed explanation of the research methodology used to conduct a study based on assertiveness training pedagogy and

college writers with ADHD. Ten undergraduates with documented ADHD who were 18 and over and had been or were currently enrolled in a writing course participated in a multiple case study to assess the results of assertiveness training intervention. Contextual, perceptual, demographic, and theoretical information were produced to create an overview of the research design. Data collection methods combined qualitative and quantitative approaches (to a large extent, the former), and included participant observation, inventories, interviews, role play, and document review. A report of the analysis and synthesis was provided. Ethical consideration and issues of trustworthiness demonstrated a carefully planned approach. It is hoped that this study will provide valuable pedagogical tools for program administrators, instructors, and students.

### **CHAPTER 4**

### PRESENTATION AND INTERPRETATION OF FINDINGS

The purpose of this multiple case study was to explore a sample of college writers' with ADHD perceptions on difficulties with their writing, as well as to evaluate an intervention which utilized communication-based classroom scenarios. Data from both the pilot and primary studies are reported here, as no substantive differences between the studies were observed. Clarification of the study's objectives were described from results in the pilot.

Data was collected from multiple case study. While the majority of data was qualitative, certain data was collected through quantitative instruments to support findings. Although participants were all undergraduates, there were differences among them along the following demographics: Age, gender, major, class standing, number of postsecondary institutions attended, and degrees earned. A demographic description of the participant pool appears in Chapter 3.

This chapter presents and interprets key findings obtained from forty in-depth interviews and a broad sample of inventories and writing samples. The data that was collected from the overall study, which was conducted over a period of approximately six months, emerged from a sample of ten participants and was divided as follows: The first two participants constituted the pilot, and the last eight participants constituted the larger

study. Five major findings, which are visually represented as figures in the next section, emerged from this study:

- 1. Before the treatment (the assertiveness training), a majority (7 out of 10 [70%]) of the participants indicated that that they were somewhat prepared or unprepared for peer writing workshops. After the treatment, a majority (7 out of 10 [70%]) of the partcipants<sup>6</sup> indicated that they were somewhat prepared or very prepared for peer writing workshops.
- 2. Before the treatment, some (4 out of 10 [40%]) of the participants indicated that they were very prepared to communicate proper feedback at school; a few (3 out of 10 [30%]) of the participants indicated that they were somewhat prepared to communicate proper feedback at work. After the treatment, a majority (8 out of 10 [80%]) of the participants indicated that they were very prepared to communicate proper feedback at school; just over half (6 out of 10 [60%]) of the participants indicated that they were somewhat prepared to communicate proper feedback at work.
- 3. Before the treatment, some (4 out of 10 [40%]) participants indicated that they were able to develop the knowledge, skills, and attitudes (KSA) necessary for success in writing courses; some (4 out of 10 [40%]) participants indicated that they did not apply these skills to other courses. After the treatment, a majority (7 out of 10 [70%]) participants indicated that they were able to develop the KSA necessary for success in

<sup>&</sup>lt;sup>6</sup> These were not the same participants. See Figure A for more information.

- writing courses; some (4 out of 10 [40%]) participants indicated that they did not apply these skills to other courses.
- 4. Before the treatment, a majority (80 out of 10 [80%]) of participants indicated that they were able to apply group communication skills learned within major-specific courses to the workplace; a few (2 out of 10 [20%] participants indicated they were able to apply group communication skills learned within English coursework to the workplace; some (4 out of 10 [40%]) participants indicated they were able to apply group communication skills learned within Communication Studies coursework to the workplace. After the treatment, all (10 out of 10 [100%]) participants indicated that they were able to apply group communication skills learned within major-specific courses to the workplace; half (5 out of 10 [50%] of the participants indicated they were able to apply group communication skills learned within English coursework to the workplace; all (10 out of 10 [100%]) participants indicated they were able to apply group communication skills learned within Communication Studies coursework to the workplace.
- 5. Before the treatment, all (10 out of 10 [100%]) participants were able to define assertive communication; no (0 out of 10 [0%]) participants indicated seeing a relationship between assertiveness and writing. After the treatment, all (10 out of 10 [100%]) participants were able to define assertive communication; a large majority (9 out of 10 [90%]) participants indicated that assertiveness training improved their

writing; a majority (7 out of 10 [70%]) of participants applied the skills learned during assertiveness training to school and work.

This chapter is organized into two parts: A) presentation of findings and B) interpretation of findings. The first part of the chapter describes findings as they answer the research questions proposed at the beginning of the study. A "winnowing process" (Seidman, 1998; Creswell, 1998) was used to reduce the data into a manageable database that was organized by codes.<sup>7</sup> (A list of these codes is available in Appendix G.) Irrelevant data was excluded from the study. By means of "substantive significance" (Patton, 2002), the researcher included holistic and richly descriptive findings that would be useful for scholars and practioners with an interest in pedagogy.<sup>8</sup> The researcher used "critical incident" and "life history" (Bloomberg & Volpe, 1998, p. 195) to engage participants in "reflexive processes" and encourage participants to "extract meaning from their own experiences" through open communication.<sup>9</sup> In order to objectively present the findings, participant responses have been included verbatim. When approriate, critical incidents and life history are interjected for clarification purposes. More information on findings are available in data summary tables (refer to

<sup>&</sup>lt;sup>7</sup> Winnowing refers to a process in qualitative research in which data is critically analyzed to distinguish usable information (Seidman, 1998; Creswell, 1998).

<sup>&</sup>lt;sup>8</sup> Substantive significance refers to the meaningfulness of a finding from a practical standpoint (Patton, 2002).

<sup>&</sup>lt;sup>9</sup> Critical incident and life history refer to types of data collected in qualitative research that are of a personal nature and provide meaningful information.

Appendix H). Whenever possible, pseudonyms in these tables have been replaced by the letters A-J to further protect participants' identities.

The second part of the chapter interprets the findings. It is organized by the following analytic categories:

- The relationship between preparedness for peer writing workshops and communicating approriate feedback at school and work. (Research Questions 1 and 2)
- 2. The development of knowledge, skills, and attitudes (KSA) necessary for success in writing courses and perceptions of professional communication learned within major-specific coursework and general education writing/communication coursework.

  (Research Questions 3 and 4)
- 3. The effects of assertiveness training intervention on communication in collaborative settings at school and work. (*Research Question 5*)

Reported findings take into consideration the literature on task selection and usage in collaborative settings, composition design and production processes, and communication practices and strategies for college writers with ADHD. Analyzed findings inform and augment the strengths and weaknesses related to scholarly and professional communication of individuals with ADHD. The chapter ends with a reexamination of the researcher's assumptions, which were identified in the first chapter.

# Presentation of Findings

The findings presented here appear to demonstrate that assertiveness training functions as a meaningful intervention for students with ADHD. Evidence was suggested by increased preparation for peer workshops, increased preparation for feedback at school and work, increased perceptions of success in writing courses, improved communication skills in collaborative settings, and evidence for assertiveness at school and work.

Finding 1: Before the treatment (the assertiveness training), a majority (7 out of 10 [70%]) of the participants indicated that that they were somewhat prepared or unprepared for peer writing workshops. After the treatment, a majority (7 out of 10 [70%]) of the participants indicated that they were somewhat prepared for peer writing workshops. See figure A below.

Figure A. Preparedness for Peer Writing Workshops (Pre- and Post-Treatment)

	Before Treatment	After Treatment
Very Prepared	3	4
Somewhat Prepared	4	3
Unprepared	3	3

Participant observation revealed that most of the participants expressed appreciation toward the individual writing instruction given in this study. All participants submitted their writing through email six hours before deadlines, while four participants turned in their writing late or asked for extensions. All participants kept in continuous

email contact throughout the study; while the six out of seven female participants and one out of three male participants kept in contact through phone, text message, and email, all three males and one female kept in contact through text message and email only. While Figure A reveals that not much change occurred before and after the treatment, the researcher noted that levels of preparedness did increase for participants across the board. Finding 1 reflects the extent of preparation that participants felt was necessary for giving feedback on school and work assignments. It reflects participants' efforts in time spent preparing, their enthusiasm for feedback, and extent of helpfulness perceived from feedback.

Interviews (see Appendix D) revealed varying perspectives on the writing process and, consequently, level of preparation and enthusiasm for peer writing workshops. Most participants expressed that they did not feel restricted and thus enthused about peer writing workshops, so long as they were allowed allowed some choice of their writing topic. Before the treatment, participants indicated that they did not always feel prepared for peer writing workshops. After the treatment, all participants expressed feeling more enthusiastic about peer writing workshops, as well as writing assignments they were working on during the course of the study. Research processes amongst participants varied: Sam expressed that he did not look for sources that would argue the opposing viewpoint, while Rachel expressed that she would look at both sides of an issue in order "to avoid bias." All participants relied on having several pages open in word processing programs and tabs in internet providers. Avery preferred being provided some structure in

writing: While discussing a study skills elective that prepared her for writing a research paper during freshman year of high school English, Avery said, "You had to write a research paper, and [the class] really broke things down for you, and you [had] little things due so it [told] you what to expect." Avery expressed that this class helped her be very prepared for peer writing workshops.

Inventories (see Appendix C) revealed much about each participant's level of preparation for writing workshops. The writing process checklist (Graham & Harris, 2005, p. 143; see Appendix A) of most participants indicated that they could sometimes be prepared for workshops, but not always. Amongst all participants, a higher frequency of checkmarks was reported underneath the "Writing" and "Revising" sections-that is to say, more participants indicated that were more likely to re-structure parts of essays, as well as re-read drafts before submission. More importance was placed on assignments of a higher grade. Only two participants indicated that they seeked assistance from tutors for help with research papers. The others reported getting help from significant others, parents, roommates, and close friends. Rachel, Keira, and Tanya reported having friends who were English majors who oversaw their research papers, and all three of these participants indicated that these friends thought writing workshops "were a waste of time" because many of thier classmates turned in low-quality work. Avery said she would have preferred using class time to having peers or the instructor "look over their paper" instead of doing worksheets. Alima said that for peer writing workshops in her English coursework, she often felt somewhat prepared and was not always sure if her peers took

her advice. Explaining her responses on the inventories, she said, "I just always think that majority rules. I feel that I give up and I can't persuade them where I'm coming from when everyone else thinks you should do it this way and then I agree with them and say to do it that way as well."

Role play revealed a variety of findings for preparedness of peer writing workshops. Both participants in the pilot study disliked writing workshops and indicated that they never went to an outside tutor of their own accord. While Rachel did not indicate that she would not visit a writing tutor after the experience, Sam expressed that he would provided that the tutor had "a PhD." or similar degree indicating expertise. On the subject of peer critiques, Libby said, "I feel that they should justify their request with specific examples, statistics, because I would do the same." Libby further explained her response by connecting it to Handout M (see Appendix A) by saying, "If I do not agree with the criticism that they have found, I ask them ... to prove it with specifics. So that I can understand where they're coming from, then I can form a ... firm stance on the subject or the criticism." Some participants approached the role play aspect of the intervention with some skepticism, while others were more enthusiastic. All participants indicated feeling satisfied about being able to provide better feedback as a result of the role play.

Document review of participants' writing samples demonstrated represented varying levels of preparation for both students. One participant in the pilot study felt prepared for writing workshops, while the other did not: Rachel said that she was almost

always prepared for bringing in drafts, while Sam missed deadlines. Alima submitted two rough drafts of the writing sample but never submitted a final version. Additionally, Alima did not make significant changes between these two drafts. On the other hand, Connie and Libby added content to their essays by way of theses, body paragraphs, and visuals. In support of this finding, Connie and Libby noted being very prepared for peer writing workshops in thier coursework.

Finding 2: Before the treatment, some (4 out of 10 [40%]) of the participants indicated that they were very prepared to communicate proper feedback at school; a few (3 out of 10 [30%]) of the participants indicated that they were somewhat prepared to communicate proper feedback at work. After the treatment, a majority (8 out of 10 [80%]) of the participants indicated that they were very prepared to communicate proper feedback at school; just over half (6 out of 10 [60%]) of the participants indicated that they were somewhat prepared to communicate proper feedback at work. See figure B below.

Figure B. Preparedness for Communicating Feedback at School and Work (Pre- and Post-Treatment)

	Before Treatment (At School)	After Treatment (At School)	Before Treatment (At Work)	After Treatment (At Work)
Very Prepared	4	8	0	2
Somewhat Prepared	5	2	3	6
Unprepared	1	0	7	2

Interviews revealed that a majority of the participants were enthusiastic about feedback during the treatment, but wished that opportunities for feedback at school could have been better. For instance, several participants indicated that their instructors preferred lecturing, and said that they would have preferred more feedback from instructor on assignments during class time. Rachel enjoyed getting feedback on her essays, although she said that not all students were as prepared for workshops as she was. Sam indicated that he gave and received minimal feedback during writing workshops, saying that he felt that the mutual feeling of writing workshops came off as "a waste of time." Similar findings appeared in the larger study as well. When asked at the conclusion of the study about seeing a relationship between assertiveness and feedback, Libby said, "If I'm clear and direct, then the author of the written work will clearly understand my feedback and be able to use it in my feedback in a productive manner."

Interviews also revealed that some participants were little to somewhat prepared to communicate feedback at school and work. Libby saw a definitive relationship between assertiveness and professional communication. When asked about her communication style at work, Libby (a campus employee) said, "I tend to be the facilitator at work. Like I'll assess ... the upcoming event and how everybody needs to get this, this, and this done so I can get my job done ... It was my job to make sure that everybody had the material they needed, the information that they needed, in order to present [at a job-related event]." Libby said that her communication style was often interpreted as aggressive by co-workers. Keira, a waiter, expressed that she communicates well with other student workers and is enthusiastic about feedback on tasks on the job; however, she also indicated that she tends to be quiet around her superiors. Avery (also a waiter), on the other hand, said, "Communication is a two-way street" with colleagues and superiors alike; in this vein, Avery expressed that she relies upon good feedback from co-workers to successfully complete tasks. Alima, who was not working during the time of the study but had worked as a waiter in the past, said that she had problems in previous jobs due to asking for excessive feedback: "Maybe it's because of the ADD, but I feel like I'm always questioning myself. When I was a waitress, they said that they never met someone who asked so many questions. When I do something I want to do it right. I'm sure I probably ask too many unnecessary questions because I doubt myself."

Other participants revealed that they felt qualified to communicate proper feedback at work. Mike (a civil employee) observed that feedback between co-workers and clients is essential to maintaining a safe work environment. He said, "If in doubt, ask for more information. More information, we're generally the ones giving the information. Occasionally, we'll have to ask for some and I'm good at that. [We have to] use the word "no" every ... day." On the job, Mike said that feedback is part of being assertive: He said, "We literally have the authority. We are the ones [who] are in charge ... We are there to make sure that nobody gets hurt." Similarly, Rachel (a tutor) expressed that her job was to provide proper feedback. Rachel said that a presentation she did in a public speaking course, which did not take place until the end of the class period "when everyone was tired of hearing presentations," went very well because of her ease with public speaking: She expressed that this correlated with her work. Sam (a campus employee) prepared progress reports of dormitory residents for police officers. Sam expressed ease with public speaking, saying that he was able to "read" his audience. <u>Finding 3:</u> Before the treatment, some (4 out of 10 [40%]) participants indicated that they were able to develop the knowledge, skills, and attitudes (KSA) necessary for success in writing courses; some (4 out of 10 [40%]) participants indicated that they did not apply these skills to other courses. After the treatment, a majority (7 out of 10 [70%]) participants indicated that they were able to develop the KSA necessary for success in writing courses; some (4 out of 10 [40%]) participants indicated that they did not apply these skills to other courses. See figure C below.

Figure C. Development and Application of KSA neccesary for Success in Writing Courses (Pre-and Post-Treatment)

	Before Treatment	After Treatment
Development	4	7
Application	6	6

During the study, participant observation revealed varying degrees of comfort with KSA necessary for success in writing courses. Some participants were more talkative in terms of expressing the opposing point of view than others. For example, when asked about brainstorming with others on a group assignment, Libby replied, "[Other group members] want to tiptoe around the subject. If I'm quiet, then everybody will else will voice their opinions, throw out topic ideas ... [In group settings], I've learned to ... give my opinion last or my idea last." Consistent with this statement, during mock writing workshops Libby listened to counter-arguments on her essay before rebutting with her own. Others were less talkative. For example, Tanya was able to request assistance with her thesis after going through Handout L (see Appendix A) by saying, "I need help rewriting my thesis in a way that it connects it to the rest of my paper effectively." However, she omitted revisions in her drafts without indicating why she did so. When going over revisions, Tanya said "Initially when I wrote this, I was going to [cite] some studies where [it was found that] people generally eat more meat than they really should ... I was going to tie that in, that was going to be another paragraph, and

then I kind of forgot." Tanya reported difficulty on finding a stance on the essay topic: "I don't know; at the end I kind of end up saying ... that [being vegetarian] is more advantageous, although ... I don't actually think that ... You can kind of tell that I'm, like, toggling back and forth in this."

Marked differences in levels of talkativeness were observed as well; all participants spoke significantly less about their writing samples and more about other topics. Some participants spoke more than others about how KSA learned in English, and Communication Studies influenced their ability to work in teams. KSA from this coursework included drafting, writing to an audience other than the instructor, grammar, thesis, topic sentences, and transitions. Mike and Dan described having difficulty forming transitions and re-iterating the thesis when writing the conclusion. Dan indicated that in his engineering coursework, he enjoyed being able to write to different audiences. Dan said that he found this "especially important" for writing lab reports and proposals. Dan said that he especially enjoyed writing lab reports in groups because "you can bounce ideas back and forth," "share the task of writing," and "not have to worry about transitions."

Interviews revealed that seven participants had completed English with grades of Bs and As, while two participants had earned Cs and Ds (one participant was taking a required English course at the time). Sam and Avery noted that they were better at "writing a thesis and counter-arguments" after writing a rhetorical analysis essay for English 103. Sam and Rachel, the pilot participants, expressed that they did not correlate

writing in English courses to writing in other courses. Time spent on writing varied with the participants. In writing lab reports, for example, Sam said that his instructors gave him a "template" each week that needed to be filled out, and he would often work on these reports "the night before" they were due. Rachel, on the other hand, did not wait until the last minute but did not outline as extensively as the writing assignments for her English courses. Mike and Dan said that they would prepare for long research papers by spending approximately six to eight hours in the library at once; Mike said that he would go to the library the night before an essay was due, "take breaks every hour or so to watch short TV shows on the Internet," "find a seat near a restroom," and would often skip his morning classes to meet the deadline.

Document review revealed insights about the participants' ability to apply writing skills in other courses. Rachel's edits did not change drastically between drafts, indicating that she already felt comfortable enough with her writing skills; Sam's writing drafts changed significantly to include more arguments and counter-arguments. Similar results were found from participants in the larger study as well.

Finding 4: Before the treatment, a majority (80 out of 10 [80%]) of participants indicated that they were able to apply group communication skills learned within major-specific courses to the workplace; a few (2 out of 10 [20%] participants indicated they were able to apply group communication skills learned within English coursework to the workplace; some (4 out of 10 [40%]) participants indicated they were able to apply group communication skills learned within Communication Studies coursework to the

workplace. After the treatment, all (10 out of 10 [100%]) participants indicated that they were able to apply group communication skills learned within major-specific courses to the workplace; half (5 out of 10 [50%] of the participants indicated they were able to apply group communication skills learned within English coursework to the workplace; all (10 out of 10 [100%]) participants indicated they were able to apply group communication skills learned within Communication Studies coursework to the workplace. See figure D below.

Figure D. Application of Group Communication Skills (Pre-and Post-Treatment)

	Before Treatment	After Treatment
Major-specific	8	10
English	2	5
Communication Studies	4	10

In interviews, Sam said that he was able to apply negative experiences with other group members in a chemistry course to prevent an event of miscommunication at work. One individual who did not show up at a meeting caused Sam and his friend to "double up" on tasks; Sam expressed taking most of the workload. The same week, Sam successfully collaborated with the same friend on a presentation at work. Sam indicated that, due to his and other students' general disinterest in writing workshops, he was not able to apply group communication skills from writing courses to the workplace.

Rachel revealed in interviews that group work in writing courses had prepared her for group work in other courses. She attributed this to the level of diversity at various postsecondary institutions she had attended, including Clemson. For a paper in a humanities course at another institution, she enjoyed meeting with students of different backgrounds and ethnicities to discuss the outcome of the project; Rachel then noted the sharp contrast at another institution, which did not have nearly as much cultural diversity in student population; Rachel said that the diversity she experienced at Clemson would be essential to helping her communicate in groups in the workplace.

Connie revealed in interviews that public presentations in a public speaking course she took at Clemson helped her to some extent with communicating in groups at school. However, she said that she did not see a connection between her job (as a tutor) at the time of the study and any coursework (major-specific or general), since this job did not utilize public speaking. Connie, a marketing major who was in her last semester and had accepted job where she would be in charge of buying products for a company, was asked to what extent she would be writing on the job, Connie answered, "I don't even know if there's a sector where writing would be a huge deal in the ... business, but you know, mine is more or less numbers and distribution charts rather than actual paragraphs." When asked to what extent major-specific coursework helped with communicating in teams at work, Connie replied, "All day, every day. In terms of teams, I'm an assistant to someone else, so I have to work with someone else ... It's all going to come down to me working [with] companies and buyers, [in a] team in terms of [being]

assistant to someone, but also in that we can't do our job without other people." Connie spoke in detail about the group presentations and term papers she was working on in all her marketing classes, saying that they were all teaching her how to work in collaborative settings in the workplace.

Tanya, an accounting major, was working at the time as a campus employee and an intern at a local company. While she said that working in teams was essential to both positions, she was able to apply much of the work she did in her major coursework towards her intern position. When asked to what extent she would be working in teams in her profession, Tanya predicted her first job after Clemson as "entry-level position" and said, "They assign you a certain account, like, for example like accounts receivable, and then you will have to ... do the math for that and then ... reconcile it with other people in your group or who are working on that audit, to ... make sure it all makes sense as one cohesive thing." Additionally, Tanya reported being happy about her internship because "I'll get to do more as an intern than I will when I first start working on the job, [and I will] see more levels within the accounting [profession] ... Like I'll actually get to go to see clients, which you may or may not do at the ... intro level." Tanya reported being very enthusiastic about her future profession and her major-specific coursework. Finding 5: Before the treatment, all (10 out of 10 [100%]) participants were able to define

assertive communication; no (0 out of 10 [0%]) participants indicated seeing a relationship between assertiveness and writing. After the treatment, all (10 out of 10 [100%]) participants were able to define assertive communication; a large majority (9 out

of 10 [90%]) participants indicated that assertiveness training improved their writing; a majority (7 out of 10 [70%]) of participants applied the skills learned during assertiveness training to school and work. See figure E below.

Figure E. Participants' Perceptions of Assertiveness

	Before Treatment	After Treatment
Able to Define Assertiveness	10	10
Aware of Relationship with Writing	0	10
Improved Writing	0	9
Applied to School and Work	0	7

Participant observation revealed that participants showed assertive body language during discussions related to assertiveness, including decreased personal space, emphatic tonality, increased facial expressions, and increased eye contact (Holland & Ward, 1990). All participants were more talkative towards the conclusion of the study. Some participants paused before presenting their definitions of assertiveness training during phases 1 and 4. All three males had their cell phones out toward the beginning of the study and put away toward the conclusion; all seven females had their cell phones put away throughout the study. Connie, in fact, said at one point that assertiveness means "having your work ready on time" and "not unnecessarily having your phone out." Some participants did not have their drafts ready for meeting times, but showed the researcher

their drafts at various stages of the writing process on laptops. One participant never submitted a final version of the writing sample.

Interviews revealed several perspectives on assertiveness, feedback, and ADHD. Similar definitions of assertiveness were found, including: "Being able to clearly state your viewpoint," "[The ability to persuade people] by getting them on your side through seeing their points of view"; "Being responsible, taking control, but also in a openopinion format;" and "Being direct and clear." One participant said that assertive feedback means "giving and listening to different perspectives on an issue" and that assertiveness training would have been beneficial to several of her experiences at school and work where teamwork was "mandatory." Several participants stated that assertiveness could be helpful for individuals with ADHD. Some select examples include: "Obsessing over things"; "You can be [quick-tongued and opinionated] and also not be assertive by not being clear;" "I am probably a better people person than some other ADD people. But for me, I've always [been] troubled with writing, so I can see ... where it's a little harder for me to be assertive than ... any other person"; "I feel like people with ADD ... have been through ... a struggle with, ... education ... so they're less likely to put themselves out there and ... think that their ideas are worthwhile ... There's some – there's a little bit of, like, a lack of self confidence."

Interviews revealed several perspectives on assertiveness, writing, and team communication at school and work. One participant said, "I get something in my head and ... regardless of what other people are saying ... I tend to just focus on [it] ... even if ...

other people are going in a different direction." The same participant expressed that she was perceived as "stubborn" by friends, family, and co-workers. Two participants expressed being perceived as "pushy and talkative" by classmates. Another participant described "biting [her tongue" when a supervisor at work was being "uncooperative and passive." Yet another participant said that he was more "submissive with [his] boss and professors." Six participants said that their writing was often "flighty" and needed to go through several drafts before being acceptable. Eight participants indicated that they disliked or had problems with academic essays and interpreting literature. At some point during the phases, all participants revealed being "good" with grammar at least once; when discussing grammar, participants said they preferred grammar for being "systematic" or "structur[ed]." Most participants used outlines.

While the majority of findings were revealed in interviews and participant observation throughout most of the study, that is particularly true in this section.

Therefore, data collection methods that provided ancillary data for Finding 5–document review, inventories, and role play–are described here seperately.

**Document review.** To preserve anomynity, writing samples are not provided. Document review of participants' writing samples—short argumentative essays—revealed the following characteristics: In terms of content, participants changed fonts (usually from Calibri or Helvetica to Times New Roman and Arial), added paragraph breaks, and added visuals (diagrams and/or pictures) throughout the drafting process. One participant expressed that this is "what she usually does" when submitting writing assignments to

instructors that undergo at least one rough draft. The same participant indicated that her class notes undergo dynamic visual changes as well, while Mike revealed that his handwriting "is chicken scratch" and "outlined this paper in [his] head." Most participants' introductions completely changed to reflect a "hook" to engage readers and clearer theses. Topic sentences and supporting details were added to body paragraphs. Revisions to conclusions varied on a case-by-case basis, with some being more extensive than others. Word choice changed significantly across the board between earlier drafts, and little in later drafts. Three participants argued for a middle point between vegetarian and non-vegetarian diets, six participants argued for a non-vegetarian diet, and one participant argued for a vegetarian diet because "it's easy for me to argue for what I don't neccesarily believe in." While all participants were asked to incorporate information from Handout N (refer to Appendix A) into the counter-argument portions of the essay, some participants developed more content than others.

Inventories. Inventories revealed the following characteristics: In the writing process checklist (Graham & Harris, 2005, p. 143) (refer to Appendix A), the majority of participants' checkmarks appear in the Writing and Revising categories. Most participants checked off "location" on the checklist gave varying responses: When asked about her responses, Rachel said that she spends most of her time working on a paper by herself and refuses to go to outside help unless absolutely necessary; Avery said that she would prefer to work by herself when writing a paper; Mike, Dan, and Keira said that they found the campus library to be a quiet place to write; Connie worked mostly at home

because of "family responsibilities" and would often "stay up late after the kids had gone to bed" to write paper; Alima said that she went to friends' houses to write.

The original response form, entitled Handout D according to Holland & Ward (1990), is part of the handouts distributed to participants and is located in Appendix A of this dissertation. Most participants were able to differentiate between assertiveness and direct aggression. Most participants had difficulty differentiate between assertiveness and passivity. The original response forms administered at the start and finish of the study, are entitled Pre-Assertiveness Inventory and Post-Assertiveness Inventory and are identified as Appendices C and F in this dissertation. Answers to the pre- and post-inventories are included in the data summary tables in Appendix H of this dissertation. Considerable changes occurred between pre- and post-inventories: Some participants checked off more categories underneath assertiveness and added one checkmark to passivity, while others retained marks on assertiveness by added more.

Role play. Role play revealed the following characteristics: Rachel showed an interest in revising her writing and acknowledged that, while she was a good writer, would often stray from her arguments and needed help with focus. Both participants claimed to be good at communicating at school and at work, although Rachel admitted that he profession as a private tutor did not allow her to interact in groups as much as she would like. Both participants indicated that they were adept oral presenters, and enjoyed public speaking. A key difference between these participants was that Rachel enjoyed actively connecting to her audience; Sam passively preferred to connect to his audience at

work by appearing easygoing and straightforward. Both participants indicated that they enjoyed using humor to connect to audiences, and preferred to be formal in professional contexts.

Additionally, Rachel skimmed over Handouts L, M. N, and O (Holland & Ward, 1990, pp. 88, 91,94, & 95) but time was not spent over developing substantial commentary. She expressed that she goes through all the steps of giving assertive criticism in Handout O "subconsciously" as a private tutor, but does not treat it as a linear process. Sam was able to develop slightly more substantial commentary in regards to Handouts L, M. N, and O (Holland & Ward, 1990, pp. 88, 91,94, & 95). In regards to Handout L, Sam responded to a criticism on his essay to which he considered being "wholly untrue" by saying, "I don't know how true your information is, since the government clearly regulates that. Also, what is your definition of cruelty?" In regards to Handout O, Sam critiqued a counterargument to the essay topic by saying, "I respect your opinion. I'm glad you care about animals. If everyone did, we wouldn't have stray dogs." Sam's essay, which argued in favor of a non-vegetarian diet, reflects the context of these comments. It should be noted that Rachel and Sam were participants in the pilot study; similar results were found across participants in the larger study.

Some interesting data was revealed during role play, in which most participants responded to worksheets and then described their experiences with networks of assistance. Sam indicated that his writing process was usually quick, formulaic, and had minimal drafting. He considered the role of writing workshops to be helpful to the extent

of grammatical errors, but independently worked on content-related revision such as main idea development and organization. Participants who were diagnosed with ADHD as minors described their familes as helpful networks at home; two participants expressed considerable faith in their parents to look at essays, since both parents were teachers. Participants who were diagnosed with ADHD as adults (that is, after turning 18 years old) described going to academic coaches and friends, but did not see their familes as helpful networks. One participant described going to the academic coach "a lot during [her] first semester," but not so much later; another participant described going to a tutor, but did not find the experience very helpful because "the person refused to proofread my paper."

Assertiveness training met some limitations in this study. While chapter 5 describes these limitations of the study in more detail, it should be noted that the researcher observed varying degrees of success across participants during the study. All participants had initial difficulties applying assertiveness to their writing. Rachel connected assertiveness as a means of persuasion that could be possible through argumentative essay writing. Rachel incorrectly defined assertiveness as a "personality trait," and expressed that individuals with ADHD "need more than [help with] assertiveness." Sam defined assertiveness as "[the ability to persuade people] by getting them on your side through seeing their points of view." Sam used assertiveness in group scenarios at school and work by distributing tasks amongst group members; before the study, he had indicated that he "was the one" who completed everything because "his level of satisfaction with the task at hand" was higher than others; Sam expressed that he

could be a "perfectionist" during group scenarios. Some participants found assertiveness training to be more helpful than others; some reported minimal changes to thier communication styles as a whole, while others reported drastic changes -- including increased confidence in their task management processes.

## **Interpretation of Findings**

The purpose of this multiple case study was to explore a sample of college writers' with ADHD perceptions on difficulties with their writing, as well as to evaluate an intervention which utilized communication-based classroom scenarios. This section of the chapter synthesizes each finding within three different analytic categories, each of which were identified as being common "themes and patterns" (Bloomberg & Volpe, 2008, p. 15) throughout the study. The findings in this study were categorized amidst peer writing workshops and feedback, perceived factors of success in professional communication, and the impact of assertiveness training on participants. These categories provide insight into the findings that are presented in the first part of the chapter. Data interpretation was multilayered: Each category looks at individual findings, the interconnectedness between each findings, and patterns in findings across cases -- i.e., "cross-case analysis" (Bloomberg & Volpe, 2008, p. 136).

Analytic Category 1: Preparedness for peer writing workshops and communicating approriate feedback at school and work

The first major finding revealed that a majority (7 out of 10 [70%]) of the participants indicated that they were somewhat prepared to very prepared for peer writing workshops. The second major finding revealed that a majority (8 out of 10 [80%]) of the participants indicated that they were very prepared to communicate proper feedback at school. Just over half (6 out of 10 [60%]) of the participants indicated that they were somewhat prepared to communicate proper feedback at work. These findings suggest that participants percieved feedback as being context-dependent. Furthemore, the findings suggest that participants saw feedback as being necessary for completing tasks. Finally, the findings suggest that workplace feedback is more challenging than classroom feedback.

Individual findings suggest that perceptions of preparedness vary on a case-bycase basis. It is likely that college writers, especially those with ADHD and learning
disorders, need to experiment with several types of study methods before considering
themselves adequately prepared for an assignment. For example, Rachel expressed that
she was very prepared for assignments in her writing coursework (including peer writing
workshops) because of her complex note-taking process which involved audio recording,
typing, and diagramming. Other participants prepared for peer writing workshops using
alternative methods, including jotting down key phrases, memorizing formulas, and
active listening. This interpretation is consistent with Butnik's (2005) study on

adolescents and adults with ADHD, in which participants had experimented with a variety of study strategies in order to be academically successful. It appears that students with ADHD (and most likely other types of disabilities in composition classrooms) need to apply a variety of techniques by in order to feel confidently prepared for any academic task, including peer writing workshops.

Interconnectedness between findings suggest that medium to high levels of preparedness for providing feedback during peer writing workshops and medium levels of preparedness for providing feedback at work (refer to the first data summary table in Appendix H). It is probable that preparedness seems to come with amount of time spent working and relationship to major course of study: While Tanya and Connie both expected feedback as being central to professional internships at which they had spent less than a month, the same participants regarded feedback as being essential during writing workshops "to bounce ideas back and forth," yet easy to formulate because they had been students for a long time. This interpretation is consistent with Ching's (2007) finding that peer response in the composition classroom is easier to formulate with time. It appears that comfort with giving and recieving feedback increases over time and is more likely to occur if the feedback is percieved as being relatable to professionalization.

Cross-case analysis suggests that the process of giving and recieving feedback in the workplace is more challenging task than at school. It is possible that college students, especially those with ADHD, are more likely to be more engaged in the feedback process if they see something of value in it. Similar to general student perceptions in composition classrooms, the majority of participants in the study liked being given essay assignments in which they were given a choice of topic. Unlike general student perception, however, students with ADHD are more likely to thrive under flexible conditions (Rief, 1998). Most participants expressed that the most enjoyable writing assignments were those that related to their major: For example, Libby described a writing assignment which involved creating a lesson plan about recycyling. The lesson plan, which was directed towards first-graders, was enjoyable for Libby on a personal and professional level; Libby promoted recycling in her family and wanted to teach elementary school children with learning disorders. Consistent with Dendy (2002), it appears that students with ADHD are more likely to focus on a subject which holds personal interest.

Analytic Category 2: Development of KSA necessary for success in writing courses and perceptions of professional communication learned within major specific coursework and general education writing/communication coursework

The third major finding revealed that a majority (7 out of 10 [70%]) participants indicated that they were able to develop the KSA necessary for success in writing courses. The fourth major finding revealed a majority (8 out of 10 [80%]) of participants indicated that they were able to apply group communication skills learned within non-writing courses to the workplace. A few (2 out of 10 [20%] participants felt they were able to apply group communication skills learned within writing coursework to the workplace. All (10 out of 10 [100%]) participants felt they were able to apply group communication skills learned within communication coursework to the workplace. These

findings suggest that some college writers with ADHD struggle with select aspects of writing. Furthermore, the findings suggest that transferring ideas onto paper is especially difficult for some college writers with ADHD. Finally, these findings suggest that college writers with ADHD may benefit from working in teams in the classroom.

Individual findings suggest that some college writers with ADHD struggle with select aspects of writing. The areas of difficulty most reported by participants in the study include organization, essay structure, and transitions. While all participants were able to recognize the role of the thesis statement in thier essays, many writers had trouble writing a direct, concise thesis statement during the earlier phases of the study. For example, a few participants referried to the "ethics" of vegetarianism in their thesis statement and never went so far as to mention ethics again. Other writers went off on tangents during body paragraphs and needed to be reminded that topic sentences could be used to rein in their ideas. Consistent with findings from Cooper's (2008) dissertation on teaching college writers with ADHD, it was easier for most participants to talk through ideas than write about them. It is likely that difficulty in keeping focused in participants' writings could be attributed to ADHD.

Interconnectedness between findings suggest that transferrance of ideas is difficult for college writers with ADHD. As Flower and Hayes (2003) suggest, beginning writers may have difficulty in understanding the multiple components of thier texts' rhetorical situation. Consistent with this finding, several participants had a difficult time seeing the relevance of thier writing. While the researcher had chosen the argumentative essay topic

because it was a relatively simple one upon which writers could choose a stance -"Argue for or against the opinion that ... a vegetarian diet is as healthy as a diet
containing meat" (see Appendix E), it was also somewhat unexpected for several
participants to tell the researcher that they had put minimal effort into the writing sample.

In fact, only two participants said that they recognized the importance of persuasive
writing to thier discipline. While this finding may be similar to general student
perceptions in composition classes, the main difference lies in individuals with ADHD
needing a sense of urgency; that is to say, an assignment percieved as having little to no
relevance may be percieved as unimportant and subsequently de-prioritized (Rief, 2008).

Since many writing deadlines related to the study coincided with exams and assignment
due dates, it is likely that participants were unable to prioritize the work from the study
above thier course-related deadlines.

Cross-case analysis suggests that college writers with ADHD may benefit from working in teams in the classroom. Consistent with findings from Davenport and Forbes (1997), de la Paz (2001), Hmelo-Silver (2004), and Howard (2000), this study revealed that students who collaborated with one another on tasks were not only able to share tasks with one another, but were better prepared to work in teams on the job. Nine of the ten participants identified themselves as facilitators and focusers in group situations: They delegated tasks and kept everyone motivated. At the same time, some participants were cognizant of the fact that they were not always the best group members; they were often percieved as being "bossy" or "lazy" by others group members (a finding consistent with

Tuckman [2007]). It is possible that working in teams can be beneficial for college writers with ADHD, provided that teams are closely supervised, deadlines are strictly enforced, and team mates are made responsible for thier work. More detailed recommendations are provided in chapter 5.

Analytic Category 3: Assertiveness training intervention on communication in collaborative settings at school and work

The fifth major finding revealed that all (10 out of 10 [100%]) participants were able to define assertive communication. All (10 out of 10 [100%]) participants indicated that assertiveness training improved their writing. A majority (7 out of 10 [70%]) of participants applied the skills learned during assertiveness training to school and work. Findings suggest that writers were able to define the concept of assertiveness and discuss its usefulness to communication at school and work. Furthermore, the findings suggest that assertiveness pedagogy is beneficial for teaching writing. Finally, the findings suggest that assertiveness training needs to be explicitly taught as relevant to the development of critical thinking.

Individual findings suggest that writers were able to define the concept of assertiveness and discuss its usefulness to communication at school and work. The interview data in the first half of this chapter appears to qualify this finding. The chart in Figure 5.2 (see Appendix H) demonstrates more participants were able to grasp the concept of assertiveness at the conclusion of the study as "letting other people know about the issue even if they do not always listen"; to quote one participant, "It's my job to

tell them about they did in a peer writing workshop." Figure 5.2 also reveals that, at the end of the study, more participants interpreted assertiveness during peer writing workshops as: "It's important to let the writer know what needs to be fixed." This finding was unexpected; the researcher expected that fewer participants would check this off on the post-inventory. Paterson (2000) suggests that clients who have undergone assertiveness training will not view issues as needing to be "fixed"; furthermore, Holland & Ward (1990) describe four different communication patterns -- direct aggression, indirect aggression, passivity, and assertiveness -- and use assertiveness as being the target communication pattern. Based on the literature that was reviewed, it is likely that assertiveness training during peer writing workshops needs to emphasize that revision is beyond mere fixing, and that peer reviewers should act assertively by combining a few characteristics from each of the communication patterns. More information on assertiveness training in writing activities is found in chapter 5.

Interconnectedness between findings suggest that assertiveness training is beneficial for teaching writing. Several participants described being positively affected from the assertiveness training. Most phases of the study took place in the midst of major assignments (that is, assignments that counted for at least 15% of participants' course grades) involving team work. This was particularly true for the participants who were marketing and civil engineering majors. One participant, a marketing major, said, "Pretty much all of my classes for the past two years have involved ... team work ... and counted for ... 20% of my overall grade for [each] class." Dan, a civil engineering major, said that

"assertiveness is essential to being persuasive," and went on to describe an experience where he was able to successfully convince other team members to solve a problem using an equation "that took less steps but got to the same answer." These findings are supported by Palmeri (2006) and Rutter (2004), both of whom suggest that technical writing emerge from the neccesity to understand technological operations and persuade stakeholders in the field of the need for clarification of directions. It appears that assertiveness training can be used to teach writers how to directly and concisely persuade colleagues of the need for action on projects.

Cross-case analysis suggests that assertiveness training needs to be explicitly taught as relevant to the development of time and project management skills. Throughout the study, a common pattern emerged: Participants became conscious of the need to focus on goal setting and time management as assignments during the semester gradually became more difficult. While a few participants expressed not being able to spend as much time on the writing sample as they would have liked, the same participants noted that assertiveness helped them to organize thier time better. Most participants described showed the researcher their organizer notebooks; they noted that, towards the end of the study, they observed and followed through on thier daily, weekly, and semester-long goals. These findings are consistent with Sidler (2008), who suggests that part of successful learning involves prioritization of tasks, and Sommers (2003), who suggests that experienced writers learn to prioritize their writing by setting goals within the context of the text (such as viewing a thesis statement as a "checklist" upon which writers

can use in forming body paragraphs). It is likely that assertiveness training can be used in the classroom to teach students how to be clear and concise in thier writing.

Revisited Assumptions from Chapter 1 and Summary of Interpretation of Findings

Presented here are assumptions that the researcher based the current study on:

First, college writers with ADHD do not feel prepared for peer writing workshops.

Second, college writers with ADHD assume they have to take on seemingly contradictory roles during peer writing workshops, including "aggressive" authority and "passive" listener. Third, college writers with ADHD perceive success in writing courses as the ability to write critically, as well as apply analytical skills in other courses. Fourth, while college writers with ADHD see group communication skills they learn in college courses other than writing as being vital to the workplace, they do not perceive group communication in writing courses to be nearly as vital. Fifth, college writers with ADHD correlate assertiveness to the writing process, group communication during writing workshops, and communication at the workplace.

To what extent were these assumptions validated? Contrary to the first assumption, the study found that college writers with ADHD likely feel somewhat to very prepared for peer writing workshops. The second assumption validated, insofar as perceptions of individuals with ADHD are often considered negative by colleagues, as Tuckman (2007) suggests. However, upon closer interpretation, the assumption was extended to include varying levels of comfort between school and work. On the other

hand, the third assumption was validated insofar as that participants' KSA was developed. However, more work needs to be done with applying KSA learned in English coursework to major-specific coursework. Considering that most participants found work in major-specific coursework to apply to professional communication, the fourth assumption was also validated. Lastly, the fifth assumption was validated to some extent: While participants were initially able to relate assertiveness to team and professional communication, they learned to relate assertiveness to writing throughout the study.

This chapter portrayed the experiences of college writers with ADHD who underwent assertiveness training. Presentation and analysis of findings underwent a multilayered approach. Through multiple case study as the primary method of inquiry for collecting data, the researcher extensively collected a multitude of information and used a coding legend based upon open-ended research questions to present the most relevant information. Following presentation of findings, the researcher interpreted the data using the following analytic categories: The relationship between preparedness for peer writing workshops and communicating approriate feedback at school and work; the development of knowledge, skills, and attitudes (KSA) necessary for success in writing courses and perceptions of professional communication learned within major-specific coursework and general education writing/communication coursework; and the effects of assertiveness training intervention on communication in collaborative settings at school and work.

Readers may draw upon the reported data with caution. While measures were taken throughout the process to identify common themes and patterns in the data, as well

as to retain consistency in data collection methods, it should be noted that the sample size, at 10 participants, was somewhat small. Findings may differ in future studies with a larger number of participants. Additionally, it should be noted that, as with any study which includes self-reported data, that participants' perceptions of themselves may have been subjective. The purpose of collecting a multitude of rich data was for participants to tell their stories. For these reasons, some findings may be specific to the sample that was under study.

Interesting interpretations emerged from the data. Regarding the relationships between preparedness and feedback, college writers with ADHD felt motivated to do well in English coursework when they were given some leeway with assignment and group choice. Besides flexibility, the target sample preferred structure and guidance to tasks. Many college writers with ADHD think creatively, which seems to be the result of experimentation with several learning approaches. College writers with ADHD need to be presented with a variety of approaches when working in teams. Assertiveness training has potential to engage most students in the college classroom, not just those with ADHD. Assertiveness training may be taught in several subjects in which students produce some written work.

### **CHAPTER 5**

### CONCLUSIONS AND RECOMMENDATIONS

The purpose of this multiple case study was to explore a sample of college writers' with ADHD perceptions on difficulties with their writing, as well as to evaluate an intervention which utilized communication-based classroom scenarios. The conclusions presented in this chapter are based on interpretations of the data. Those conclusions are drawn upon: A) impact of student preparation and motivation on feedback sessions; B) relationships between school, work, and feedback sessions; C) perceptions of and influences on professional team communication; and D) perceptions of assertiveness, the writing process, and team communication. Following this discussion are limitations of the study and recommendations for faculty and staff, students, and further scholarship. The chapter ends with overall reflections from the researcher.

### Conclusions

The conclusions that were drawn here were based on findings and analysis from the study. Those conclusions are as follows: A) impact of student preparation and motivation on feedback sessions; B) relationships between school and feedback sessions; C) perceptions of and influences on professional team communication; and D) perceptions of assertiveness, the writing process, and team communication.

### Student Preparation and Motivation on Feedback Sessions

Assertiveness training is relevant and important to higher education professionals across the disciplines. It is an important approach for two main reasons: First, it decentralizes the instructor by making students responsible for their own learning, and second, it prepares students to be productive team mates in collaborative settings. If instructors envision the classroom as a training ground for long-term personal and professional success, then assertiveness training is a tool for enabling that success. By making students have responsibility over their own work, the instructor is able to facilitate critical thinking involved in the learning process rather than act as the authority figure whom the class reports to get the answer.

Assertiveness training stems from problem-based learning and self-regulated strategy development, which are useful for teaching students with learning and behavioral disorders. Research that has been done on these techniques has found them to be beneficial for students with learning disorders specifically with time management and goal-setting, major areas of difficulty (Graham & Harris, 2005). In problem-based learning, student teams collaborate on solving some ill-structured problem that has presented by the instructor (e.g., the presence of nuclear waste near a school site) (Hmelo-Silver, 2004). In self-regulated strategy development, students learn to work first with the instructor, then with other students, and finally by themselves. For this approach to be effective, it must be highly structured.

Assertiveness training, in contrast, focuses on planning, monitoring, and revising. While rhetoric studies has taken this approach to the English classroom, such as Edwards's application of cognitive strategy instruction in writing (CSIW) in peer workshops (2005), the researcher argues that assertiveness training, as an extension of CSIW, may be applied in classes across the curriculum. Instructors can apply assertiveness training across the curriculum by integrating a short writing unit towards the beginning of the academic term and reviewing it at critical dates throughout the term (such as before assignment and exam dates). Instructors may also apply assertiveness training across the curriculum into daily lesson plans, such as assigning students the task of persuading their peers about the right way of solving an open-ended, content-specific task (such as solving an engineering or physics problem). Three important aspects of CSIW are writing, dialogues, and collaboration. According to Hallenbeck (2002), the first stage "[engages writers] in the processes and strategies related to planning, organizing, writing, editing, and revising" (p. 229). The second stage uses "think-alouds' ... to model the thinking and inner talk reminiscent of expert writers (p. 229), while the third stage reminds students of the importance of audience and purpose by integrating collaborative partnerships with other students (p. 228). Assertiveness training can also be useful in solving ill-structured problems in collaborative settings. Further research needs to be done to assess the effectiveness of assertiveness training within collaborative contexts, particularly with planning, monitoring, and revising work.

### School and Feedback Sessions

Most instructors would agree that feedback is helpful when learning any new task. In an academic context, it is important to encourage dialogue amongst team mates, especially when working with students who have ADHD. The study conducted for this dissertation found that social interaction is important for individuals with ADHD in the writing classroom, so long as that interaction is carefully structured and closely monitored. Individuals with ADHD are highly susceptible to the fact that instructors set the tone of the class: When teaching a challenging cognitive skill such as writing, instructors need to structure social interaction in a manner that allows feedback. Instructors can structure social interaction by having closely monitored breaks during lectures, in which students are assigned a small task to be completed within groups. Having a few of these "break-out" sessions during a class period can allow students to reflect on what they just learned. More research needs to be done with how team members would talk about the problem from several angles: As Englert and Mariage (1991, p. 330) point out, "A classroom discourse that leads to a common vocabulary and set of assumptions about writing" is achieved through dialogue. When students talk about the same issue, they bond. They depend on one another for answers. Further research needs to be done in these areas.

Perceptions of and Influence on Team Communication

The researcher was surprised to learn much information beyond participants' writing processes. Adults with ADHD tend to perceive team communication as necessary

for success, provided that flexibility is built into schedules. Most participants described themselves as "chatty" or "talkative," characteristics which had positive and negative effects at work. For adults with ADHD, professional communication is perceived as challenging; perceptions of success on the job seem to relate back towards interest and confidence. A large majority of them showed an interest in helping others to learn tasks; chosen professions seem to have included a need for interpersonal communication. More research needs to be done on these areas.

While this study concluded that more interest in subject matter leads to confidence in carrying out tasks, more research needs to be done on the influence on control. All participants indicated that the more control they had over scheduling and learning tasks, the more control they felt on the job. Directions in further research may answer the question of a relationship between assertiveness, confidence, and control in professional communication situations.

Assertiveness, the Writing Process, and Team Communication

The majority of this study focused on the value of assertiveness training for teaching the writing process. More research needs to be conducted on the influence of assertiveness on the writing process. The study concluded that adults with ADHD like group work for comparing their perspectives on solving problems; it gives them practice in listening, a task which is difficult. The study also concluded that assertiveness training taught individuals how to focus on review that would be helpful for writing a paper.

Adults with ADHD seem to like group work because it makes it easier to work on tasks that would have been more difficult to do alone. At the same time, students may also dislike group work because it can be repetitive -- especially for those who may be more advanced. In contrast, adults with ADHD may feel that the rest of the group may be going too fast, and they are the ones who needs more time.

Adult learners with ADHD, because of their need for extra time to complete tasks that others may not need so much time on, may require additional coaching. Instructors should not feel obligated to spend extra time with these individuals; instead, they may break down tasks for the entire class and encourage dialogue and community through social interaction. More research needs to done in encouraging independent learning where students use the body of knowledge presented by their classmates.

# Limitations of the Study

### Restricted Sample Size

The number of participants in this study was somewhat small (n=10), especially in comparison with studies employing quantitative approaches. It should be noted that Cooper (2008), also utilizing interviews, had a small number of participants in her qualitative study as well. It may be beneficial to replicate the study with a larger sample.

### Sample Selection

While many interested applicants emailed researchers, scheduling availability restricted sessions to occur on Mondays, Wednesdays, and Fridays. Time restriction on researchers' and participants' sides thereby narrowed the sample selection of the study.

### Reliance on Audio Recording and Field Notes

Recording errors, and consequently the loss of audio data, occurred during the pilot due to cellular reception. To compensate for future mishaps, a separate MP3 recorder was purchased; in addition, extensive reflective field notes were taken. Since field notes were taken throughout the entire study, participants were often asked to "pause" while note-taking took place.

#### Issues of Researcher Bias

While no qualitative study is completely objective, researchers worked together to compare results in order to verify analysis. Researcher bias was thus narrowed due to inter-rater reliability. A critique of this study may be the limited possibility of generalizing this study to other programs. The researchers advise that further correlations between assertiveness training and the writing process of college students with ADHD be done.

# Post-Test Data Interference

An issue of trustworthiness may be pretest data interference on the posttest: students may feel obligated to alter their results, given that they know they are part of a

study. For this reason, pretests and postests will be administered using a variety of question types (e.g. multiple choice, short answer, and essay).

### **Overall Limitations**

Assertiveness training met some limitations in this study. The researcher observed varying degrees of success across participants during the study. All participants had initial difficulties applying assertiveness to their writing. Definition of assertiveness varied, although they mostly centered on persuasion. At the beginning of the study, some participants found it difficult to grasp a relationship between assertiveness and wrting. Although assertiveness was often seen as the "ideal" type of communication, some participants equated assertiveness to characteristics more closely related to direct aggression at some points of the study. Some participants found assertiveness training to be more helpful than others; some reported minimal changes to thier communication styles as a whole, while others reported drastic changes -- including increased confidence in their task management processes. Assertiveness training with some revisions would be preferable to a complete replication of the current study.

### Recommendations

In this section, the researcher offers a basic curriculum that was adapted from a pedagogy course (Morris, 2011). The template from which it was developed appears in Appendix K. This curriculum can be used by writing program administrators and English and Communication Studies faculty, and is useful for college writers with ADHD. Note

that overall goals are defined by ultimate and foundational outcomes, while mediating outcomes are meant to be performed on a more regular basis. Formative and summative assessments are addressed in the lesson plans. Overall recomendations for further scholarship in composition, professional communication, and disability studies conclude this section.

Curriculum Part 1: Developing Learning Outcomes

Courses: English Composition; Technical Writing; Business Writing; Group

Communication

<u>Ultimate Outcome:</u> Students will write a research proposal in which they will address a set of challenges that is of current interest in their major field of study. The text should be *complex* in nature: That is, it should be interdisciplinary (address at least two other disciplines that relate to their field), *policy-driven* (address existing solutions in the field and the policies that drive them), *active* (involve a plan of explicitly labeled steps), and *collaborative* (design a multi-step process that requires at least three individuals to complete).

This assignment consists of two parts: The first part is a 6-8 page proposal, while the second part is a 15-minute group presentation. Groups will be assigned during class.

Mediating Outcomes:

Students will be able to:

- 1) State current issues in their discipline.
- 2) Relate their major field of study towards other related disciplines.

- 3) Identify major stakeholders in their discipline.
- 4) Collaborate with other students.
- 5) Translate disciplinary language (jargon) to non-majors as a common discourse.
- 6) Employ accepted methods of research within the discipline.
- 7) Schedule an acceptable time frame under which the solutions can be implemented.
- 8) Differentiate between what solutions that have and have not worked in the field.
- 9) Inspect and refute counter-arguments to the proposed solution.
- 10) Construct a proposal that would be acceptable in most business settings.
- 11) Appraise the effectiveness of professional solutions.

### Foundational Outcomes:

Students will be able to:

- 1) Identify at least two-three trends or issues in their discipline.
- 2) Research proposed solutions to issues in their discipline.
- 3) Identify professional societies and journals in their discipline.
- 4) Write a thesis statement and outline that asserts their point of view on current disciplinary issues.
- 5) Critique others' assignments assertively and accept feedback on their own work.
- 6) Create a calendar of events that breaks up the solution into stages.
- 7) Argue for and against the validity of their solution.

# **College-Wide Learning Outcomes:**

This assignment addresses four student learning outcomes that were adopted by the Clemson University Department of Student Affairs <sup>10</sup>:

# I. Self Knowledge

· Demonstrate independent research skills on electronic databases.

# II. Leadership and Communication

· Articulate arguments in front of an audience of peers.

# III. Social Responsibility

 Demonstrate fundamental communication skills through active listening and assertive feedback with other students.

### IV. Life Skills Application

· Collaborate with peers to write and present on professionally relevant trends.

## Curriculum Part 2: Lesson Plans

# Sample Lesson Plan A

<u>Foundational Outcome 1:</u> Students will identify at least two-three trends or issues in their discipline.

<u>Foundational Outcome 2:</u> Students will relate their major field of study towards other related disciplines.

Mediating Outcome 4: Students will collaborate with other students.

<sup>&</sup>lt;sup>10</sup> See Student Learning Outcomes at< <a href="http://www.clemson.edu/administration/student-affairs/dean/student-learning-outcomes.html">http://www.clemson.edu/administration/student-affairs/dean/student-learning-outcomes.html</a> for more information.

Instructor Prep: Class will take place in a computer lab. A Smartboard is preferred. Instruct students *not* to log in or become situated, since they will change seats in a minute.

Collect student names and majors on a post-it. Collect post-its and re-seat student so that students of different majors are sitting next to one another. Instruct students to log in and open Blackboard as well as a blank Word document. Check with computer lab policy on file-saving; students may need to be taught how to save files. (Approx. 5 minutes)

Student Prep: Students will write freely towards the following prompt: "Define assertiveness. Is there a relationship between assertiveness and professional communication? Explain your reasoning. Next, compare the group work in this class to your other classes."

Students should compare free writes with someone sitting nearby. Circulate the room, asking for common responses. (Approx. 10 minutes)

Mini-lecture and activity: On the board, write assertiveness, professional communication, and group work on the board. Ask the class what comes to mind when thinking of these terms. Write around the terms, drawing lines between words that relate to one another.

As responses quiet down, draw a line between the first three words. Explain that companies value team work, and productive teams use assertiveness to communicate with one another. If using a Smartboard, highlight and color-code the terms. Explain that they will be conducting group research today and presenting a mini-research presentation by

the end of class. Explain that the presentation should be appropriate for a business setting, and that employee credibility is sacrificed when there's too much text on a Powerpoint.

Show the following questions on the board, indicating that these should be *explicitly* answered during the presentation:

- Identify names of three professional organizations, at least one in each field.
   Explain each organization's specific purpose and importance to the field.
- Identify names of three professional publications, at least one in each field.
   Explain each publication's specific purpose and importance to the field.
- 3. Identify one common trend, at least one in each field. (e.g., employment outlook, technological advances, historical changes).
- 4. Identify one common trend, at least one in each field. (e.g., employment outlook, technological advances, historical changes).
- 5. Analyze and diagram 3-4 connections between the different disciplines in the group. Explain how being assertive could help team members from different disciplines produce more productive teams in the work place.

In groups of three to four, students will research professional websites in their field and use the campus library database to locate information. One student should be the recorder, while another student should be the Powerpoint recorder. Together, students will research and create a Powerpoint by answering questions from the board. Students will email notes and Powerpoints to the instructor.

Encourage creativity. Explain different ideas for structure (e.g., one slide per discipline, or one slide per bullet in above step), but they can make present as they would like, provided that it's professionally appropriate. (Approx. 30-40 minutes)

Reflection: Student teams will present their Powerpoints to the class. To ensure active listening, each student in the audience will submit three main points they remembered from the presentations. Give about 2-3 minutes writing time after each presentations. Did the teams follow the guidelines above? Did they present their ideas clearly and professionally?

At the end of presentations, students should answer the following free write: "What did you learn about assertiveness? Has your definition changed? Which group did the best presentation? How did that group explain connections between disciplines, organizations, publications, and trends? (Approx. 30 minutes or longer, depending on class time)

Note to the Instructor: This activity can go on for two class periods, if needed. Observe the groups to see how they interact with one another; the lesson can be used a testing ground for forming project groups.

### Sample Lesson Plan B

<u>Foundational Outcome 4:</u> Students will write a thesis statement and outline that asserts their point of view on current disciplinary issues.

<u>Foundational Outcome 5:</u> Students will critique others' assignments assertively and accept feedback on their own work.

<u>Foundational Outcome 7:</u> Students will argue for and against the validity of their solution.

Mediating Outcome 4: Students will collaborate with other students.

<u>Mediating Outcome 5:</u> Students will translate disciplinary language (jargon) to nonmajors as a common discourse.

<u>Instructor Prep (Day 1):</u> Class will take place in a traditional classroom setting with desks and chairs. A Smartboard is preferred. Align desks in rows facing one another; alternatively, students may position their chairs so that they face another. There should be a line of desks between the students. (*Approx. 5 minutes*)

Rows will resemble the following diagram:

Figure F. Seating Chart

Row A: xxxxxxxx

00000000

Row B: xxxxxxxx

Student Prep: Ask students to bring a printout of an article that discusses a key trend or issue in their field, as well as a one-paragraph summary of the article. They will have highlighted and annotated the article's thesis statement, topic sentences, and supporting evidence. (Approx. 10 minutes)

Mini-lecture and activity: Collect article summaries. On the board, write *argument*, counter-argument, and refutation. Explain the definition of each word, asking for ideas

and creating a flow chart surrounding each word as students volunteer answers. If using a Smartboard, highlight and color-code the terms.

As responses quiet down, explain that workplace writing does not take place in a vacuum, but is often reviewed by different peers, some whom they may not personally know. Explain that today's lesson will simulate a peer review in the workplace, but at a more fast-paced setting.

Show the following questions on the board, indicating that these should be <u>explicitly</u> answered during the reviews:

- Identify the writer's thesis statement. Is it direct, clear, and concise? Is it assertive? Write a comment on the bottom that helps them improve their thesis.
- Argue for the main idea. Write two points you agree with.
- Argue against the main idea. Write two points you disagree with.

Students in Rows A and B will face one another. Hand off a paper to each pair.

Say "Go," and students will discuss and respond to the questions on the board (see last step). Give 2 minutes to respond, then say, "Row A: Shift!" Students in Row A will move down one seat. Repeat this step two more times with 75 second discussions. Then do the entire process again, with Row B shifting three times. Circulate and answer questions as necessary.

Encourage creativity with responses, but understand that with repetition, there will be more quiet times. Students need to write as much as they can in the given amount of time, even if they find themselves saying the same thing. Observe pairs who are

becoming unfocused; give these pairs a new paper to work on. (Approx. 20-40 minutes, depending upon questions from the students and how much you choose to elaborate)

Reflection: Call time and collect papers. Students will return to their seats. Pass pack the marked-up papers. Allow the class some time to read responses and ask questions. Allow independent time for revision.

Ask students for some samples of critiques that they received. Remind them that assertive critique is positive and negative. Remind them that assertiveness means understanding and controlling their own ability to stand up for themselves and get their message across in a clear manner (Paterson, 2005). Write these critiques on the board. If using Smartboard, highlight similar responses (or use colored markers, if using white board). Explain that similarities come across all writers, no matter what discipline they are coming from.

Students will write freely towards the following prompt: "Choose two pros for your argument and analyze how they can work in a business setting. Choose two cons for your argument and refute them, analyzing how they can work in a business setting." For the next class, ask students to draft a solution to the issue that was covered in the article. (Approx. 15 minutes)

Mini-lecture and activity (Day 2): Collect solution papers. Repeat the same process as in Day 1, but explain that the focus will now be on assessing the solution. Explain that solutions are often reviewed by colleagues who they may not know personally; these

colleagues may not even know anything about their speciality. Explain that today's lesson will simulate a peer review in the workplace, but at a more fast-paced setting.

Show the following questions on the board, indicating that these should be explicitly answered during the reviews:

- Argue for the main idea. Write two points you agree with.
- Argue against the main idea. Write two points you disagree with.
- Explain whether the solution is feasible. E.g., does the writer offer a timeline?

  Does the writer offer stages? Offer suggestions for improvement.
- Explain whether the solution is jargon-free. Offer suggestions for improvement.

  Repeat as last time. Observe closely, and make sure that unfocused students receive papers different papers. (Approx. 20-40 minutes, depending upon questions from the students and how much you choose to elaborate)

<u>Reflection:</u> Call time and collect papers. Students will return to their seats. Pass pack the marked-up papers. Allow the class some time to read responses and ask questions. Allow independent time for revision.

Students will write freely towards the following prompt: "What have you learned about argument, counter-argument, and refutation over the past two days? How would assertiveness assist in helping to achieve a scheduled solution? How would your proposed solution be divided amongst task members? Be specific." (Approx. 15 minutes)

Note to the Instructor: Instructor prep is the same on both days. Encourage students to move around and talk to other students who they don't know before and after class.

Doing so will foster a collaborative setting by having them engage in social interaction.

Talk to students about their majors, moving around the classroom as they respond. Doing so will model appropriate social interaction.

# Sample Lesson Plan C

<u>Foundational Outcome 5:</u> Students will critique others' assignments assertively and accept feedback on their own work.

<u>Foundational Outcome 6:</u> Create a calendar of events that breaks up the solution into stages.

<u>Mediating Outcome 3:</u> Students will Identify major stakeholders in their discipline.

Mediating Outcome 4: Students will collaborate with other students.

Mediating Outcome 11: Students will appraise the effectiveness of professional solutions.

Instructor Prep (Day 1): Class will take place in a computer lab. A Smartboard is preferred. Beforehand, instructor will have prepared a blog of prepared assignments. 11

Students should already be experienced in posting original blog entries, as well as responding to other students' blogs. Students will have open three Internet tabs: the campus library website, the class blog, and Blackboard or WebCT (or other course management module, depending upon institutional preference). Students should also have a blank Word document open. Check with computer lab policy on file-saving; students may need to be taught how to save files. (*Approx. 5 minutes*)

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<sup>&</sup>lt;sup>11</sup> A sample educational blog that has been prepared by the researcher is available at <a href="http://writetodie.wordpress.com/">http://writetodie.wordpress.com/</a>>.

Student Prep: Students should have done research on a major company already, and brought a one-paragraph summary of that company's organizational structure. They should have already read the article, "Organizational Structure." 12

Students will freely write to the following prompt: "Explain the logic behind your company's organizational structure. Propose an alternative structure, using one from the article you read. Why is this one more effective?"

After writing, have students share their responses with a partner. Circulate the room and survey each student's preferred structure type. (Approx. 10 minutes)

Mini-lecture: Write Customer/Market Organization, Matrix Structure, and Strategic

Business Units (SBUs) on the board. Write survey responses on the board. Ask students to compare the results--why were some preferred over others? What are some characteristics of each structure? What are advantages and disadvantages to each structure? Who are some companies associated with each structure? As students respond, write responses on the board. If using a Smartboard, highlight and color-code the terms (if using a white board, use markers of different colors).

As responses quiet down, explain that today's lesson will focus on:

- Looking at the big picture,
- Solving an abstract problem through concrete solutions, and
- Providing realistic deadlines to that problem.

<sup>12</sup> More information is available at <a href="http://www.referenceforbusiness.com/management/Ob-Or/Organizational-Structure.html">http://www.referenceforbusiness.com/management/Ob-Or/Organizational-Structure.html</a>>.

Explain that these are universal workplace expectations, no matter what company they work for. Explain that they will work in teams today to use this approach to solve an ill-structured problem. (Approx. 10 minutes)

Activity: Break up the class into 3-4 person groups. Each group member should have members of the same organizational structure that they chose as their alternative in the homework assignment. Assign the problem.

In groups of three to four, students will go into Blackboard and download a worksheet. The worksheet is a Word document with 5 blank text boxes (representing the multi-step process) and a space underneath that answers the three questions noted above.

Each group member will locate an article from the library database. The article should address an important aspect about solving the problem. Each group member will need to convince one another why their chosen article informs the group. The group will fill out the worksheet and upload it to Blackboard before the end of class. Each group will then post their solution to the class blog. Stress that posts need to be appropriate for a business setting.

For homework, students will reply to another person's post. They will evaluate the solution by providing two pros and two cons. (Approx. 30-40 minutes)

Reflection: During the next class, review the organizational structures in class. Go through the posts. Ask each group to briefly present why they structured their solution the way they did. Ask them to what extent organizational structure influenced their solution.

Have students freely write to the following prompt: "Create an ideal organizational structure, using one of, or a combination of, the structures we've been discussing. How will this company address a current trend, or solve a problem, in your profession? Who are stakeholders of this company? What kind of advertising will the company project?"

Review the uploaded worksheet, making sure that students have fulfilled the bulleted parts of the assignment noted above. (Approx. 15-45 minutes, depending upon questions and how much you elaborate. See note below for variations.)

Note to the Instructor: The writing at the end of this lesson may be used to help students prepare for the proposal assignment, as well as a guided practice tool. The next class session can be used to write and go over student blogs and responses, as well as conduct a peer-review workshop. Ill-structured problems may be found by doing a Google search for "business problem scenarios for students."

Alternatively, students can do a scientific case study on the topic, "AIDS and the Duesberg Phenomenon," and summarize opposing sides of the argument "HIV Causes AIDS" (Herreid, 1999). Case study, according to Herreid, is more time-consuming but teaches students to argue and counter-argue an issue. The Center for the Study of Problem-Solving (2011) publishes a problem-solving bibliographic library that is searchable by type of problem and solution.

### Curriculum Part 3: Assessing Student Learning

<u>Ultimate Outcome:</u> Students will write a research proposal in which they will address a set of challenges that is of current interest in their major field of study. The proposal will be complex and assertive.<sup>13</sup>

Mediating Outcome: Students will collaborate with other students.

<u>Lesson Plan</u>: Refer to Sample Lesson Plans A, B, and C (above).

<u>Instrument to Assess Students' Mastery of Outcome-Proposal Assignment:</u>

For this end-of-semester project, you will create a research proposal that addresses a set of challenges that is of current interest in your major field of study. This assignment consists of two parts: The first part is proposal, while the second part is a 15-minute group presentation. Every student will turn in an individually graded proposal, but the presentation will be graded together. Groups will be assigned during class.

This assignment should be **complex** in nature: That is, it should be *interdisciplinary* (address at least two other disciplines that relate to your field), *policy-driven* (address existing solutions in your field and the policies that drive them), *active* (involve a plan of explicitly labeled steps), and *collaborative* (design a multi-step process that requires at least three individuals to complete). Furthermore, your solution needs to be **assertive**: It should directly and concisely appeal to your readers, and is well-organized.

<sup>13</sup> This assignment was adapted from Foley, Gulesserian, LeMieux, Ptacek, Reilly, & Voss 2011.

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# Background:

- Your group: A consultancy of researchers in several fields who are addressing a problem in your field
- Your audience: A board of executives will is financing your project.

### Guidelines:

- Choose a debatable issue that is related to your field.
- Identify an appropriate organizational structure for the solution.

### Format:

- Follow MLA guidelines in the Bedford Handbook, including use of in-text citations and a Works Cited page.
- Write 6-8 pages with standard margins and font size.
- Include a visual (such as a chart); this is separate from the page length.
- Include 3-4 outside sources from peer-reviewed, academic databases and websites (at least two articles from the library database).
- Write and present grammatically well.
- Design a 15-minute interactive and multimodal presentation.

# Deadlines:

•	 Topic proposal due
•	 Rough draft due
•	 Final version due
•	Presentation due

# Scoring Mechanism (Rubric)<sup>14</sup>

Figure G. Rubric

Advanced	Capable	Apprentice	Novice
integrated at least two other related disciplines •Successfully put proposed solution within context of existing solutions •Successfully designed a multi- step process that was easy to follow and explicitly labeled	two other disciplines •Generally discussed other solutions •Designed a multi- step process with relatively little need for further explanation	•Summarized or made questionable connections to other solutions •Generated a simplistic process with vaguely labeled steps •Integrated the need for some	other disciplines •Ignored or made unapparent connections to other solutions •Generated a simplistic process
readers •Concisely appeals to readers •Effectively uses transitions and topic sentences to guide readers •Thesis statement	readers, with few flaws •Mostly concise, with few flaws •Lacks a few transitions and topic sentences •Thesis statement guides readers	major flaws •Unclearly written; needs guidance to understand •Well-organized	•Irrelevant to readers •Vaguely written, with major flaws •Topic sentences and transitions are not apparent •Thesis statement is flawed or missing

<sup>&</sup>lt;sup>14</sup> Components of assertiveness are adapted from Paterson, 2005.

	Advanced	Capable	Apprentice	Novice
Format	errors •Little to no (0-2) grammatical errors •Page length met (excluding visual) •Sources clearly and fluidly support the argument	Page length met (excluding visual) Sources clearly support the argument	<ul> <li>Page length not met</li> <li>Sources somewhat support the argument</li> <li>Number of sources met; authoritative sources used</li> </ul>	•Extensive MLA format errors •Excessive (8+) grammatical errors •Page not length met •Sources vaguely support the argument, or not present at all •Number of not sources met; authoritative sources not used
Presentation	engaged audience's attention •Unique and relevant presentation format used •Effectively utilized	the multiple	little regard •Acceptable format used, with little relevance to presentation •Utilized a few of	•Audience given little or no regard •Unacceptable format used; did not connect with presentation •Did not utilized the multiple intelligences •Poorly organized
Instructor Notes/Po	int Deductions:	1		Final Grade:

Notes for Instructor Regarding the Assessment: Proposals are practical assignments, affectively putting students into the role of instructor by organizing researched material into an accessible format that can then be explained to unfamiliar audiences. This assignment prepares students to work in teams with peers of different disciplines, where they need to exchange drafts. The format of the rubric is divided according to the

assignment, with levels of knowledge dictating each category. Content and organization are replaced with the broader, more descriptive terms "complexity" and "assertiveness." Preparing students to be more assertive in their writing requires separate lessons on direction, conciseness, and organization. Lessons in assertiveness may be used to facilitate unity, coherence, and logic in writing.

# Curriculum Part 4: Assessing Teaching Effectiveness

Besides formal student evaluations, department head evaluations, and peer evaluations, the following methods may be put into the instructor's portfolio and used to assess teaching effectiveness:

Instructor discusses and self-rates: This method works well when supplemented by formal student evaluations, department head evaluations, and peer evaluations. According to Felder and Brent (2004, p. 201), instructor self-ratings achieve detailed descriptions of "all-education-related activities," including "teaching, advising, mentoring (students and colleagues), developing courses, creating instructional materials, and educational research." The instructor can report a reflective statement, scholarship of teaching and learning projects, and any additional training (Center for Research on Learning and Teaching 2011). The method's weakness, of course, is the chance of subjectivity. Self-evaluations should take place at the end of the semester.

<u>Peer advising and mentoring:</u> This method works well in conjunction with peer evaluation. According to the Center for Research on Learning and Teaching (2011), it is one of "multiple measures involving multiple sources of data" and works well with

"professional development." A suggestion for this curriculum is having instructors of the same course who are using assertiveness training meet on a monthly basis and report the results to the department at the end of the semester. Faculty may be given professional development credit for participating on a curriculum committee. To lessen the chance of subjective reporting, a committee of different colleagues could conduct assertiveness training during the next semester. Reports could then be compared at the end of the academic year.

Writing-to-learn activities: This method works well because it measures students' progress during the semester. Besides being an effective way of producing informal teaching evaluations, writing-to-learn activities work as an effective teaching tool. These "short, informal writing assignments ... do not require grading" are valuable for producing student feedback (Nilson, 2010, p. 167) and include free writes, journals, summaries, and learning logs. Although time-consuming, depending upon length and frequency of being collected, these writing-to-learn activities can be used to measure subject material needing to be emphasized.

### Recommendations for Further Scholarship

This section discusses recomendations for further scholarship. These areas include quantitative study, younger students, and writing centers. Broadly speaking, these recommendations for research address inform issues associated with disability studies, cognitive theories in composition studies, and user-centered design.

In composition and professional communication, an issue of concern is the modeling of group communication. Group communication models in composition already address certain needs in groups, including consensus and difference (Trimbur, 2003), consensus and reform (Myers, 2003), and multiculturalism (Lu, 2003). These models are primarily concerned with certain factors that contribute towards decision-making in collaborative settings. These models have not been previously studied ill-structured problem solving in depth. Ill-structured problem solving needs to be studied in composition studies.

The researcher believes that quantitative approaches need to be addressed in these areas. The study conducted in this dissertation project used a qualitative approach to collect and analyze research findings. As group communication models in composition develop, especially those centering on ill-structured problem solving and assertiveness training, studies using quantitative approaches can be beneficial.

Another issue of concern in composition, especially in professional communication, is the need to reach out to younger students. As Farkas (1991) points out, the need for users' understanding of documentation in computerized workplaces is growing; additionally, Anson (2003) addresses the need for teaching and writing in a culture of technology. Since Farkas and Anson, digital literacy has greatly expanded past the needs of employers to younger audiences. To address this need, major publishing firms, such as Pearson's MyCompLab, currently provide educational software versions for secondary and post-secondary institutions.

The researcher believes that more research needs to be done in expanding digital literacy to younger audiences. The study conducted in this dissertation project collected data from adults. As research develops in this area, studies using younger audiences can provide a better perspective upon assertiveness training and implication in digital literacy in collaborative settings for younger audiences.

Yet another area of concern in composition and professional communication is writing center scholarship. As Olsen (1993) points out, discourse communities are essential building blocks for creating identity in the classroom, especially in terms of transferrance to the workplace. Writing centers are positioned between the classroom and the workplace, given that staff are often faculty and students in training. At Greenville Technical College in Greenville, South Carolina, the tutoring staff is currently composed of faculty. Students often learn the discourse of academia in writing centers, a skill which is important in the workplace.

The researcher believes that more research needs to be done in expanding assertiveness training to writing centers. Participants in the study for this dissertation project described being unaware of, or not satisfied with, writing centers. As research develops in this area, studies concerning the helpfulness of assertiveness training in writing centers can turn the conversation of writing center staff training towards the discourse of academia and the relationship of this discourse to workplace communication.

These issues and recommendations are broadly associated with disability studies, cognitive theories in composition studies, and user-centered design. The researcher believes that integrating task selection, task management, and decision-making into the various collaborative settings described here can be useful. Because task completion for adults with ADHD requires more time and guidance, assertiveness training can be used to enhance existing techniques in collaboration pedagogy to encourage learners to independently perform tasks (Howard, 2005). While such studies have been completed, such as within problem based learning (Graham & Harris, 2005), further research needs to be done concerning assertiveness training in collaborative contexts. Assertiveness training draws interesting comparisons between Flower's meaning making in learning, development, and literacy (1994), and should be considered when designing future studies.

Some instructors might perceive the practice as broad, slow, and repetitive. In actuality, being given the opportunity to engage in deliberately in-depth decision-making processes forces learners to think more about the idea under study: The ability of individuals with ADHD to see the big picture and, with instruction, envision each component of the picture (Drechsler, Rizzo, and Steinhausen, 2008). Adult learners with ADHD are especially cognizant of the need to make decisions. Instructors need to constantly remind their students of the big picture, subgoals to accomplish the picture, and tasks to finish to reach subgoals and the big picture. That is to say, tasks need to be

broken down and be applicable to the problem. Instructors should prepare well in advance, as early in the term as possible.

To challenge these rebuttals to assertiveness training, a basic curriculum needs to address certain concerns shared in curriculum design. The Center for New Designs in Learning and Scholarship at Georgetown University addresses these concerns, which include analyzing current teaching practices and learning goals, designing links between goals and course design, considering the role of assessment, and developing teaching strategies and goals (2011). The curriculum prescribed in this chapter seeks to answer these concerns.

### Researcher Reflections

Social interaction with others is essential to learning; as Bruffee's (2003) idea of the "conversation of mankind" argues, knowledge is created through social interaction. Social interaction can be a complex situation for students with ADHD. Although adults with ADHD are talkative and enjoy interacting with others, the process of completing tasks takes longer. Adults with ADHD tend to be risk-takers and facilitators: They see the overall objective and break it up into manageable chunks that the members of the team may tackle. Social interaction will inevitably occur during collaborative sessions; instructors may feel the need to impose authority in an attempt to keep students on task. But the beauty of group work, especially in assertiveness training, is that students learn to keep themselves on task as they improve.

Working in collaborative settings is therefore essential to engaging critical thinking in all students, not just those with ADHD. Long-term groups should be diverse, and they should be responsible for their own communication. Keeping students on track is not the instructor's job--it is the responsibility of the team's. But students should never be left in the dark. Instructors can facilitate collaborative settings by requiring self-assessments of team member contributions, with one or two meetings with the instructor to help student groups out.

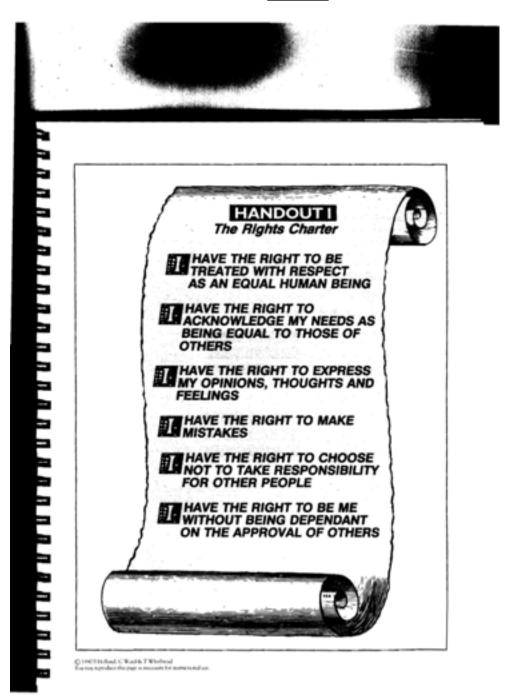
The researcher believes that assertiveness training, when used within collaborative settings, can be a valuable model for teaching time management and goal-setting skills to adult learners with ADHD. Through task selection and usage and decision-making in collaborative settings, the practice encourages students to think about their learning process and apply knowledge outside of the classroom.

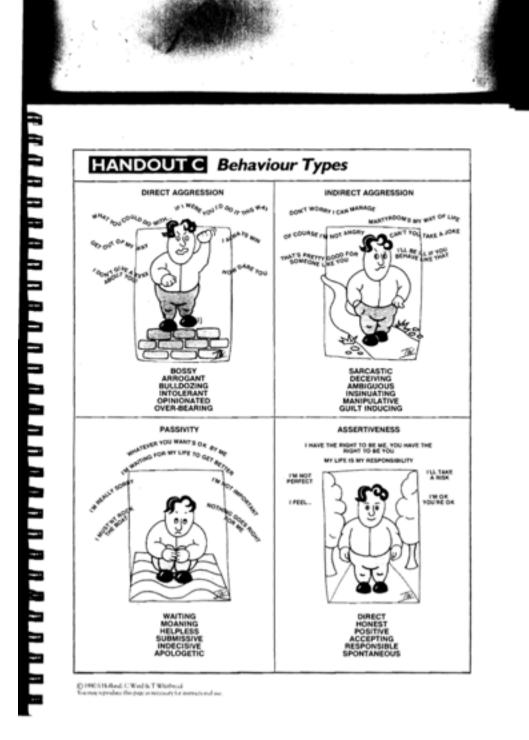
The researcher believes that this study is useful for communication and composition scholars in understanding how ADHD affects student learning. Due to provisions guaranteed by the Americans with Disabilities Act (ADA) and the Family Educational Rights and Privacy Act (FERPA), students with disabilities are not required to disclose their disability with instructors. However, this project hopes to direct writing instructors from disciplines across the curriculum towards a pedagogy enabling students to be more self-conscious of their feedback and presentation, thereby preparing them for more efficient communication in the workplace.

**APPENDICES** 

### Appendix A

### Handouts

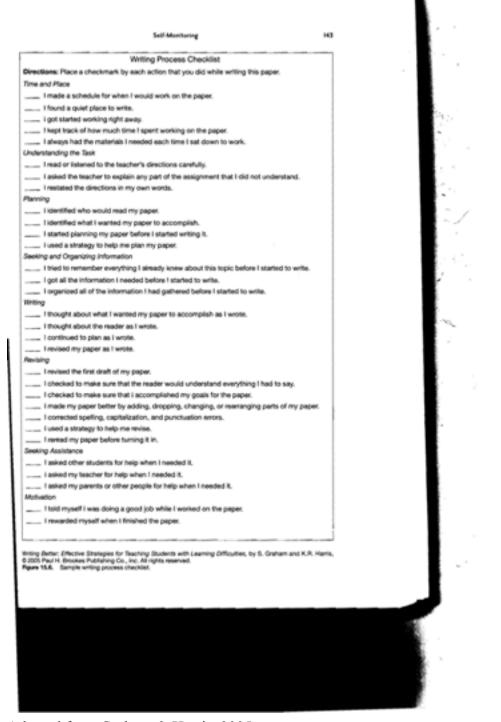




### HANDOUT D Identification of Different Behaviours Situation Behaviour "I'd like to help you with the A neighbour calls at your house to ask you to help with the school fair. fair, but I'm not sure if I'm free then. I'll get back to you tomorrow. "Oh good, you're here at last. You arrange to meet a friend I'm absolutely starving; I didn't get time for lunch today, but it for a meal. He is half an hour late, but full of apologies. doesn't matter." The television repairer "I'm fed up with your awful service — I won't buy promises to return the following day with your anything from you ever again!" television. When he doesn't, you ring the shop to complain. You are served a cold cup of You say nothing to the waitress but pull a face when you drink tea in a cafe. Your friend telephones you "I'm ever so sorry, but I'm and chats for a long time. You going to have to go: the cat's would like to finish the just been sick and the children are shouting for their tea. I'm really sorry. I hope you don't mind." A meeting is being planned to "I'd like to come to the meeting, but unfortunately I arrange a Christmas porty. The time suggested is not won't be able to. Please would convenient for you. you give my apologies and ensure that I'm sent the minutes?" You bang on the wall, shouting: "Will you stop that You live in a shared house. The person whose room is next to yours plays load music well into the night. dreadful row, I'm sick to death Well, I'm not really sure, but You go to buy a pair of shoes. if you think they look nice, I'll The salesman is very pushy and says, 'I think these are have them." perfect for you', but you are not convinced.

	Situation	Response	Behaviour
9	Your parents telephone to invite you to a party they are giving for their friends. You are uncomfortable with most of the people invited and do not want to go.	In a sarcastic tone: "It sounds like a whole lot of fun — just what I need after a hard week in the office. I suppose you'd be upset if I didn't come."	
)	The barnaid serves you the wrong drink in the pub.	"What do you call this? I asked for a shandy, not lager — get your act together, love."	
1	You are feeling put upon at work and decide to ask for a rise.	"I'd like to talk about my pay with you. Please could we meet next week to discuss it further!"	
12	You ask your friend to look after your dog for the weekend, while you visit your sick aune.	"I know I can rely on you to look after Rover for me this weekend. I couldn't possibly not visit Aunt Jane and there's no one else I could ask."	
13	Your teenage child has left her bedroom in a complete mess.	"I feel angry when you leave your clothes all over the floor, Ros; I'd like you to tidy it up before the weekend."	
4	A new colleague, with whom you share an office, smokes continuously. You dislike the smell of smoke.	"Gosh, I've really got a headache, but then smoky atmospheres always bring on my migraine."	
15	Your partner is obviously upset about something, but doesn't discuss it with you.	"What the hell's wrong with you, sitting there sulking all evening?"	
16	A friend has borrowed money from you several times and not repaid it. She asks again.	"Er, um, well actually, that's OK, I think. Um, how much would you like?"	

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Adapted from Graham & Harris, 2005.

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HANDOUT G The Toolkit			
Contained in the toolkit are the following assertive skills:			
Body language	This skill is explained and illustrated in Handout F.		
Setting the scene	This is to help you to feel in control in the situation.  Choose the time and place.  Clarify what you want to say.  Decide what you would like from the situation.		
Disclosing feelings	This skill can easily be forgotten; it is, however, extremely effective. Use 'T statements, own your feelings: eg. 'I feel angry,' 'I feel happy.' Take responsibility for how you feel; avoid blaming others.		
Being clear	Assertive communication requires concise, specific speech. Use short, clear statements. Avoid unnecessary padding.		
Staying with it	Use this skill in conjunction with empathising. Stay with your statement. Avoid getting hooked or side-tracked.		
Empathising	In order to communicate with respect and equality we need to empathise with the other person.  Acknowledge that you have heard what the other person has said.		
Working for a compromise	This skill enables both parties' needs to be met. Assertiveness is not a matter of winning. Compromise leaves both parties feeling good.		
Remember	You can carry this toolkit with you wherever you go.		

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# HANDOUT L Refusing and Requesting

### Refusing Requests

A verbal 'No' with a non-verbal 'Yes' equals confusion: ensure your body language is complementary, rather than contradictory.

How do you know when you want to say 'No'? Listen carefully, check what your body is telling you. Is it a sinking or rising feeling?

### Be clear . . .

if in doubt, ask for more time or more information.

### Be direct . . .

ensure that you use the word 'No' in the sentence.

### Be bonest . . .

avoid making long-winded excuses or blaming others; use a simple explanation where appropriate.

### Be firm . . .

set limits, recognising them as yours, and that other people's limits will be

### Be equal . . .

acknowledge the right of the person to be upset by your decision. Be sure to emphasise that it is the request that is being rejected, not the person.

### Remember

Saying 'Yes' when you want to say 'No' means short-term gain, but longterm pain.

### Making Requests

Being assertive involves taking care of our own needs as well as those of others.

State directly what it is you want or need. Hints and insinuations merely confuse people.

### Remember

Take a risk and ask for what you want; it is worth it!

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# HANDOUT M Self-Respect

- Behaving assertively demonstrates that we value ourselves.
- Each time we behave assertively our self-respect rises.
- Accepting ourselves as we are is more productive than constantly comparing ourselves with other people.
- When things go wrong in our lives we need to remind ourselves that we are worthwhile.
- Demonstrating respect for ourselves leads to gaining respect from others.

Compliments

- Learning to 'let in' the compliments we are given increases our selfesteem.
- Accept a compliment gracefully check that you are not throwing it back in someone's face.
- Disclose your positive feelings give compliments to others.

### Remember

Taking the risk of trying something new is a good way of building selfrespect.

© 1905 Holland & C World You may reproduce this page as tecopiary for instructional are:

# HANDOUT N Receiving Criticism

Step one Be sure to listen carefully to what is being said.

Step two Check that you understand; if not, ask for an example.

Step three Avoid the old conditioned responses:

Direct Aggression — denying it vehemently Indirect Aggression — saying nothing, sulking

Passivity - believing it is all true

Step four Decide on the truth of the criticism; is it:

completely true? partly true? wholly untrue?

When the criticism is completely true:

Say so clearly	"Yes I agree, I am lazy."
Explain how you feel	"I feel bad about it."
Enquire how your behaviour affects others	"Does it make things difficult for you?"

### When the criticism is partly true:

Agree with the part that is true	"You're right, I can be irresponsible sometimes "
Deny the rest	"But I'm usually a sensible person."

### When the criticism is wholly untrue:

Reject the criticism firmly	"No, I don't agree, I'm not stupid"	
Add a positive personal statement	"I'm an intelligent woman"	
Ask why they think this	"What makes you think that!"	

Step five Consider what you have learnt from the criticism. Decide if you want to alter your behaviour as a result.

### Remember

Avoid hanging on to it - let it go!

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# HANDOUT O Giving Criticism

This needs to be done constructively.

Avoid making vague insinuations or direct personal attacks.

Talk positively to yourself, acknowledge that the other person Step one:

has the right to be treated with respect.

Choose the time and the place; ensure privacy. Step two:

Step three: Avoid vague generalised statements: "This typing's a real mess."

Make clear, specific statements instead: "When I checked my

letters I found several spelling mistakes.

Step four: Express how you feel: "I feel anxious about discussing this with

you; however, when I checked my letters I found . . .

At this stage it is important to open up the discussion by asking for the other person's point of view: "Why do you think this is happening?" and how the situation could be resolved: "How can

we sort this out?"

State clearly what the outcome of their new behaviour will be; if Step six:

you have reached an agreement it will be positive: "I'm sure this will really improve the image of our department." If there is no agreement you will need to spell out what you want to happen and what the negative consequences will be: "I'd like you to check all your letters before they come to me; if there is no improvement in your work by the end of the month, I'll have to

discuss it with the personnel department."

Step seven: Summarise the points that you have agreed on, ending with a

positive comment.

### Remember

Step five:

Putting off giving criticism only prolongs the agony!

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### Appendix B

### Informed Consent Form

# Information Concerning Participation in a Research Study Clemson University

# Communication crossroads: Assertiveness pedagogy for college writers with Attention-Deficit/Hyperactivity Disorder (ADHD)

### **Description of the Research and Your Participation**

You are invited to participate in a research study conducted by Bryan Denham and Dev Bose of the Department of Communication Studies at Clemson University. The purpose of this research is to understand how ADHD affects the writing of college students, as well as how ADHD affects group work in academic and professional settings.

Your participation will involve completing questionnaires, interviews, and writing exercises. Questions will address adulthood problems related to writing and group work. Your participation may also include the use of audio recording, which will be used to transcribe interviews and dialogue during activities. Data will be securely stored and destroyed at the end of the study.

The amount of time required for your participation will be approximately 6 hours, over the course of several months. Materials will be distributed by and submitted to in person by Dev Bose.

Interviews will take place in person. When meeting in person, interviews will take place in a testing room in the Student Disabilities Services (SDS) section of Redfern Health Center, at Clemson University.

### **Risks and Discomforts**

There are no known risks associated with this research.

### **Potential Benefits**

Benefits to you that would result from your participation in this research will include individual writing instruction. This research may help us to understand how ADHD affects the writing of college students with ADHD.

Incentives			
For your participation, you will be offered a gift of either a) a \$50 giftcard to Target OR b) a \$50 giftcard to Wal-Mart. The giftcard will be distributed at the end of your participation in the study.			
Please select: Option A OR Option B (Select only one.)			
Protection of Confidentiality			
We will protect your privacy. Your identity will not be revealed in any publication that might result from this study. We will not have identifying information about you until your consent has been given.			
Voluntary Participation			
Your participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate at any time. You will not be penalized in any way should you decide not to participate or to withdraw from this study.			
Contact Information			
If you have any questions or concerns about this study or if any problems arise, please contact Dev Bose at Clemson University at [researcher's cell phone number]. If you have any questions or concerns about your rights as a research participant, please contact the Clemson University Office of Research Compliance (ORC) at 864-656-6460 or <a href="mailto:irb@clemson.edu">irb@clemson.edu</a> . If you are outside of the Upstate South Carolina area, please use the ORC's toll-free number, 866-297-3071.			
Consent			
I have read this consent form and have been given the opportunity to ask questions.			

A copy of this consent form will be given to you.

I give my consent to participate in this study.

Participant's signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Appendix C

# Assertiveness Pre-Inventory

Please respond to the following as if you were helping another student with his/her writing. Place an "X" next to the line if you agree. Note that your beliefs may fall under several categories.

When working with others, assertiveness communication means getting your point
across as quickly and to the point as possible.
Being assertive sometimes implies thinking about yourself before others.
My feedback is worthwhile as long as it helps someone else.
If I contribute a lot of time time dealing with the issue, my feedback will be
accepted and appreciated by others.
Other writers can't handle, or just ignore, my feedback.
It's impolite to disagree when a peer says something about my paper that looks ok
to me.
If the majority of other writers in a group disagree with me, then I must be wrong.
If I start speaking up I'll never stop.
It's important to be nice during a feedback session.
When working with others, assertiveness communication means getting your point
across so that others will pay attention to what you have to say to them.
I'm entitled to let the writer know my thoughts.
If I'm not aggressive with my feedback, the writer's paper will not improve.
It's important to let the writer know what needs to be fixed.
Honesty is the best policy. Writers need to be told exactly what is wrong with their
paper, or they will turn in something that is unacceptable.
I would rather work on my own paper than risk turning one in that may have been
incorrectly revised by another student.

When working with others, assertiveness communication means letting other peop
know about the issue even if they do not always listen.
Writers need to be more considerate of my feedback.
I'm afraid of trying to be assertive with my feedback and failing.
If the other person doesn't <u>like</u> my feedback, there's no point in giving any.
If the other person doesn't <u>use</u> my feedback, there's no point in giving any.

<sup>\*\*</sup> Adapted from Paterson, *The Assertiveness Workbook*, 2001.

# Appendix D

# **Interview Questions**

1.	Describe how ADHD feels to you. **
2.	How would you describe yourself as a student? **
3.	Which English courses did you take in high school? Can you tell me about them? **
4.	How do you feel about writing? **
5.	Do you consider yourself someone who works well in groups?
6.	What do you feel about group work in the courses you took in high school?
7.	Do your college English instructors use group work? Describe it. What do you feel about group work in the courses you are taking, or have taken, during college?
8.	Do your other instructors use group work? Describe another course, other than English, in which you use group work. What do you feel about that group work?
9.	Have you ever heard your college English instructor(s) use the term "writing workshop"? What does that term mean to you?
10.	Have you ever heard your college English instructor(s) use the term "peer feedback"? What does that term mean to you?

- 11. How have your English instructors prepared you for writing workshops? Is there anything you or the instructor could have done to make the workshops more effective.
- 12. Describe any activities you do to help you prepare (pre-writing, brainstorming, etc.) Do you feel you were prepared for the writing workshops you participated in? Why or why not?
- 13. What do you feel constitutes helpful feedback on a paper? What would you like to hear from another student if you were trying to get helpful feedback on the paper?
- 14. Do you write in your other courses? How do you feel that any present or past English courses have prepared you to work in other classes?
- 15. What is your major? To what extent do you perceive you will be writing in your profession? To what extent do you perceive you will be working in teams in your profession?
- 16. Do you feel that college has prepared you to communicate in teams at work? If so, are there any classes that have prepared you to do so?
- 17. Are there any college activities not directly related to coursework (e.g., fraternities, creative inquiry, athletics, etc.) that you feel may help you communicate in teams at work?
- 18. Are you currently working? If so, what is your occupation? To what extent do you work in teams on the job? (If not working, move to item 22)
- 19. What kind of writing do you do at work now? What role does writing serve?
- 20. Describe a negative experience at work that involved working with at least two other people. What were some of the barriers you faced? What could have been done to improve the situation?

- 21. Describe a positive experience at work that involved working with at least two other people. Is there anything specific about communication in that situation that made it positive?
- 22.. How do you feel about deadlines? Do they help or hinder your production of writing? \*\*
- 23. Can you *talk* about your ideas more readily (with more comfort and ease) than you can *write* about them? Why do you think that is? \*\*
- Are there any rules that you always try to follow when writing? If so, what are they? \*\*
- 25. Do you have trouble sticking to your thesis and/or outline? Why do you think that is? If you don't have this problem, how do you stick to your plan? \*\*
- 26. Have you ever received back a writing assignment from an instructor with many suggestions for improvement, where revision of that assignment was required? How long do you set it aside before revision?
- 27. Have you ever sought outside help on a paper (e.g., from your instructor, other students, or tutors) that was returned to you for revision? If you did, what kind of feedback did you receive? Did it prove helpful?
- 28. Please describe yourself as a passive, passive-aggressive, aggressive, or assertive communicator. Explain why think so. Can you give any examples?
- 29. What do your classmates think of peer feedback you give them on assignments?
- What do you think about peer feedback your classmates give you on assignments? Do you find that the feedback your classmates give you on writing assignments is valuable?

- What do you think about brainstorming with other students on a group assignment?
- 32. Describe the role, or roles, that you usually play in a group (such as risker, tester, facilitator, or focuser). Are there any situations at school where you saw yourself as a certain type of communicator? Are there any situations at work where you saw yourself as a certain type of communicator?
- 33. How do you view social interaction in your writing courses? Do you feel it plays a role? How do you feel about assertiveness and writing? How do you feel feel about assertiveness and communicating at school and work?
- 34. Describe assertiveness. Do you see a relationship between assertiveness and feedback? Do you see a relationship between assertiveness and persuasion? Do you see a relationship between assertiveness and ADHD? Please explain.
- 35. Do you see a relationship between assertiveness and problem-solving? Do you see a relationship between assertiveness and group communication? Do you see a relationship between assertiveness and professional communication? Please explain.

<sup>\*\*</sup> Question drawn from Barbara Graham Cooper, "At the brighter margins," doctoral dissertation completed at University of Maryland, College Park, May 2008.

## Appendix E

### **Take-Home Writing Assignment**

### Writing prompt

You will assigned a topic that will reflects our discussions during the study. Please draft responses during sessions and independently. We will go over your writing in session. Exact response lengths will be given during session, but will be approximately 300-600 words

\*\*General goal: Take a position on the assigned topic and write a paper that persuades the reader that you are right.

### Elaborated goals: Include

- A statement that says what you believe
- Two or three reasons that support your belief
- Examples or supporting information for each reason
- Two or three reasons why others might disagree
- A statement about why these reasons are wrong

### Argumentative essay topic

Human beings do not need to eat meat in order to maintain good health because they can get all their food needs from meatless products and meatless substances. A vegetarian diet is as healthy as a diet containing meat. Argue for or against the opinion above.\*\*

\*\*Adapted from Private Writing, 2011. <a href="http://www.privatewriting.com/">http://www.privatewriting.com/</a> argumentative essay topic.html>

<sup>\*\*</sup>Adapted from Graham & Harris, 2005.

# Appendix F

# <u>Assertiveness Post-Inventory</u>

Please respond to the following as if you were helping another student with his/her writing. Place an "X" next to the line if you agree. Note that your beliefs may fall under several categories.

When working with others, assertiveness communication means getting your point
across as quickly and to the point as possible.
Being assertive sometimes implies thinking about yourself before others.
My feedback is worthwhile as long as it helps someone else.
If I contribute a lot of time time dealing with the issue, my feedback will be
accepted and appreciated by others.
Other writers can't handle, or just ignore, my feedback.
It's impolite to disagree when a peer says something about my paper that looks ok
to me.
If the majority of other writers in a group disagree with me, then I must be wrong.
If I start speaking up I'll never stop.
It's important to be nice during a feedback session.
When working with others, assertiveness communication means getting your point
across so that others will pay attention to what you have to say to them.
I'm entitled to let the writer know my thoughts.
If I'm not aggressive with my feedback, the writer's paper will not improve.
It's important to let the writer know what needs to be fixed.
Honesty is the best policy. Writers need to be told exactly what is wrong with their
paper, or they will turn in something that is unacceptable.
I would rather work on my own paper than risk turning one in that may have been
incorrectly revised by another student.

When working with others, assertiveness communication means letting other people
know about the issue even if they do not always listen.
Writers need to be more considerate of my feedback.
I'm afraid of trying to be assertive with my feedback and failing.
If the other person doesn't <u>like</u> my feedback, there's no point in giving any.
If the other person doesn't <u>use</u> my feedback, there's no point in giving any.

### Appendix G

### **Coding Legend**

1. Preparedness for peer writing workshops

PW1 Very preparedPW2 Somewhat preparedPW3 Unprepared

This descriptor indicates the extent of preparation that participants felt was necessary for peer writing workshops. It reflects participants' efforts in time spent preparing, their enthusiasm for workshops, and extent of helpfulness perceived from workshops.

2. Preparedness for communicating proper feedback at school and work

PF1 Very preparedPF2 Somewhat preparedPF3 Unprepared

This descriptor indicates the extent of preparation that participants felt was necessary for giving feedback on school and work assignments. It reflects participants' efforts in time spent preparing, their enthusiasm for feedback, and extent of helpfulness perceived from feedback.

3. Knowledge, Skills, and Attitudes/KSA used in the classroom (what they think they needed)

**KSAC1** Knowledge of content; ability to write critically and collaborate with others **KSAC2** Transference of content; ability to apply skills learned in writing/communication coursework to other coursework

This descriptor indicates what participants perceived as constituting necessary KSA for success in the classroom. It reflects participants' ability to use critique in their writing and work within a collaborative setting, as well as calls on participants to define success in the classroom; it also reflects whether participants were able to use the KSA in coursework other apart from writing and communication.

4. Knowledge, Skills, and Attitudes/KSA used in the workplace (what they think they needed)

**KSAW1** Transference of content; ability to apply KSA of professional communication taught in major-specific coursework to the workplace

**KSAW2** Transference of content; ability to apply KSA of professional communication taught in general education writing/communication coursework to the workplace

This descriptor indicates what participants perceived as constituting necessary KSA for success in the workplace. It calls on participants to define KSA necessary for success in the workplace and to describe the extent to which KSA was taught in their coursework. Furthermore, it asks participants to compare the usefulness of KSA in courses specific to their major to courses not specific to their major (i.e., general education).

5. Comprehension of group and professional communication skills, based on assertiveness pedagogy and ADHD (what they learned after assertiveness training)

**AP1** Knowledge of content; ability to define and explain KSA of assertive communication

**AP2** Transference of content; ability to apply assertive communication to school and work

This descriptor indicates the extent of success of the assertiveness training on participants. It reflects participants' ability to correctly explain assertiveness and bility to apply assertiveness to school and work.

\*\*Adapted from Bloomberg & Volpe, 2008.

# Appendix H

## **Data Summary Tables**

Note: Data in some tables have been left intentionally blank. Pseudonyms have been replaced with letters. These findings show post-treatment (that is, after assertiveness training). Pre- and post-treatment findings are located in chapter 4.

Finding 1. Upon enrollment in a college writing course, to what extent did participants perceive they were prepared for peer writing workshops?

Preparedness for Peer Writing Workshops			
Participant	Very Prepared	Somewhat Prepared	Unprepared
A		X	
В			X
С		X	
D	X		
E	X		
F	X		
G			X
Н		X	
Ī		X	
J			X
N=10	3 = x	4 = x	3 = x
	30%	40%	30%

Finding 2. What did participants perceive they needed to learn to communicate proper feedback on drafts of their work? (Note: These findings reflect feedback at school.)

Preparedness for Communicating Proper Feedback				
Participant	Meet deadlines, speak with instructor only	Prefer grammar-based critique	Prefer content-based critique	
A	X			
В	X			
С			X	
D	X			
E	X			
F			X	
G		X		
Н		X		
Ι			X	
J			X	
N = 10	4 = x 40%	2 = x 20%	4 = x 40%	

Finding 3. How did participants attempt to develop the knowledge, skills, and attitudes (KSA) they perceived as necessary to achieve success in writing courses?

Method of developing KSA necessary for success in writing courses				
Participant	Follow prompt, take notes, & meet with instructor	Get out outside help (from family, friends, and/or significant others)	Work independently	
A	X			
В			X	
С		X		
D			X	
E			X	
F			X	
G		X		
Н	X			
I			X	
J		X		
N=10	2 = x 20%	3 = x 30%	5 = x 50%	

Finding 4. What factors did participants perceive might help them discover how college coursework specific to their major versus general coursework could prepare them to communicate effectively in the workplace? (Note: These findings reflect application of coursework towards in professional communication.)

Factors of Effective Workplace Communication				
Participant	Taught in Major Coursework	Taught in Writing Coursework		
A		X		
В	X			
C	X			
D		X		
E	X			
F	X			
G	X			
Н	X			
Ī	X			
J	X			
N=10	8 = x	2 = x		
	80%	20%		

Finding 5.1. What factors did participants perceive have impeded, improved, and/or had no effect on their communication skills after assertiveness training intervention?

Effectiveness of Assertiveness Training Intervention on Communication Skills			
Participant	Impeded	Improved	Minimal Impact
A		X	
В		X	
С		X	
D		X	
E		X	
F		X	
G		X	
Н		X	
Ī		X	
J		X	
N=10	0 = x 0%	10 = x $100%$	0 = x 0%

Finding 5.2. What factors did participants perceive have impeded, improved, and/or had no effect on their communication skills after assertiveness training intervention?

Responses to Pre- and Post-Inventories				
Item	Marked Pre- Response	Tally to Pre- Response (Raw Frequency and Percentage)  N = 10	Marked Post- Response	Tally to Post- Response (Raw Frequency and Percentage) N = 10
1. When working with others, assertiveness communication means getting your point across as quickly and to the point as possible.	A: X C: X D: X E: X	4 = x 40%	A: X B: X C: X D: X E: X J: X	6 = x 60%
2. Being assertive sometimes implies thinking about yourself before others.	C: X F: X I:X	3 = x 30%	B: X C: X E: X F: X I: X J: X	6 = x 60%
3. My feedback is worthwhile as long as it helps someone else.	A: X B: X C: X D: X E: X F: X G: X H: X I: X J: X	10 = x 100%	A: X B: X C: X E: X F: X I: X	6 = x 60%
4. If I contribute a lot of time time dealing with the issue, my feedback will be accepted and appreciated by others.	F: X G: X H: X	3 = x 30%	G: X	1 = x 10%

5. Other writers can't handle, or just ignore, my feedback.		0 = x $0%$		0 = x 0%
6. It's impolite to disagree when a peer says something about my paper that looks ok to me.	Н: Х	1 = x 10%		0 = x 0%
7. If the majority of other writers in a group disagree with me, then I must be wrong.	G: X J: X	2 = x 20%		0 = x 0%
8. If I start speaking up I'll never stop.	A: X	1 = x 10%	A: X	1 = x 10%
9. It's important to be nice during a feedback session.	C: X D: X F: X G: X H: X J: X			6 = x 60%
10. When working with others, assertiveness communication means getting your point across so that others will pay attention to what you have to say to them.	B: X C: X E: X F: X H: X	50%	A: X B: X C: X D: X E: X	5 = x 50%
11. I'm entitled to let the writer know my thoughts.	B: X C: X D: X E: X G: X H: X I: X		C: X D: X E: X G: X I: X	5 = x 50%
12. If I'm not aggressive with my feedback, the writer's paper will not improve.	F: X I: X	2 = x 20%	F: X I: X	1 = x 10%

13. It's important to let the writer	A· X	7 = x	<i>A</i> : X	9 = x
know what needs to be fixed.	B: X C: X D: X F: X G: X I: X	70%	B: X C: X D: X E: X F: X G: X I: X J: X	90%
14. Honesty is the best policy. Writers need to be told exactly what is wrong with their paper, or they will turn in something that is unacceptable.	B: X C: X D: X E: X F: X G: X H: X I: X J: X	9 = x 90%	B: X C: X D: X E: X F: X G: X I: X J: X	8 = x 80%
15. I would rather work on my own paper than risk turning one in that may have been incorrectly revised by another student.	A: X B: X D: X E: X F: X H: X	6 = x 60%	A: X B: X E: X I: X	4 = x 40%
16. When working with others, assertiveness communication means letting other people know about the issue even if they do not always listen.	D: X E: X G: X I: X	4 = x 40%	A: X D: X E: X G: X I: X	5 = x 50%
17. Writers need to be more considerate of my feedback.		0 = x 0%		0 = x 0%
18. I'm afraid of trying to be assertive with my feedback and failing.	C: X H: X	2 = x 20%	C: X I: X	2 = x 20%
19. If the other person doesn't like my feedback, there's no point in giving any.	I: X	0 = x 0%		0 = x 0%
20. If the other person doesn't use my feedback, there's no point in giving any.		0 = x 0%	B: X I: X J: X	3 = x 30%

Finding 5.3. What factors did participants perceive have impeded, improved, and/or had no effect on their communication skills after assertiveness training intervention?

Responses	Responses to "Handout D: Identification of Different Behaviours"		
DA - Direc A = Assert	ect Aggression t Aggression		
Correct Response	Participant Response	Tally of Correct Responses (Raw Frequency and Percentage)	
		N=10	
1. A	A: C B: P C: C D: C E: C F: C G: P H: C I: C J:C	8 = x 80%	
2. IA	A: C B: C C: C D: P E: C F: P G: C H: C I: P J:IA	6 = x 60%	
3. DA	A: C B: C C: C D: C E: C F: C G: C H: C I: C J:C	10 = x 100%	

		1.
4. P	<i>A:</i> IA	3 = x
	<i>B</i> : C	30%
	C. IA	3070
	C: IA	
	D: No response	
	E: C	
	E. C	
	F: IA	
	<i>G</i> : P	
	H: C	
	<i>I:</i> IA	
	J:IA	
	<i>7.1A</i>	
	1, -,	
5. P	<i>A:</i> IA	3 = x
	<i>B</i> : A	30%
	<i>C</i> : C	
	<i>D</i> : C	
	<i>E</i> : C	
	F: A	
	Н: А	
1		
1	I: IA	
	J:A	
6. A	A: C	10 = x
0. A		10 - x
	<i>B</i> : C	100%
	<i>C</i> : C	
	C. C	
	D: C	
	<i>E</i> : C	
	F: C	
	<i>G</i> : C	
	<i>H</i> : C	
	11. C	
	<i>I:</i> C	
	J:C	
	7.0	
7. DA	<i>A</i> : C	9 = x
/. DA		
	<i>B</i> : C	90%
	<i>C</i> : C	
	D. C	
	D: C	
	<i>E</i> : C	
	F: C	
	ب. ر 	
	<i>G</i> : C	
	Н: С	
	μ1. C	
	μ: C	
1	<i>I:</i> C <i>J:</i> A	
1		
D D	1.6	10
8. P	A: C	10 = x
	<i>B</i> : C	100%
	<i>C</i> : C	
	<i>D</i> : C	
1	E: C	
1	<u>н</u> . С	
1	F: C	
1	<i>G</i> : C	
	Н: С	
	<i>I:</i> C	
	J:C	
1	p.c	

		,
9. IA	<i>A:</i> C	10 = x
P. 1/A	и. С	IV A
	<i>B</i> : C	100%
	G G	
	<i>C</i> : C	
	D: C	
	<i>E</i> : C	
	<i>L</i> . <i>C</i>	
	F: C	
	<i>G</i> : C	
	II. C	
	Н: С	
	<i>I</i> : C	
	J:C	
	p. C	
10 D.4	1.0	0
10. DA	A: C	9 = x
		90%
	<i>B</i> : C	90%
	<i>C</i> : C	
	D: C	
	<i>E</i> : C	
	E C	
	F: C	
	<i>G</i> : C	
	Н: С	
	μ1. C	
	<i>I</i> : C	
	J:A	
	P	
11 A	1. C	0
11. A	A: C	9 = x
	<i>B</i> : C	90%
	<i>μ</i> . C	19070
	C: DA	
	D: C	
	<i>E</i> : C	
	F: C	
	<i>G</i> : C	
	Н: С	
	<i>I</i> : C	
	f. 0	
	J:C	
12. IA	<i>A</i> : P	6 = x
12. IA	71. 1	
	<i>B</i> : A	60%
	D. 11	0070
	<i>C</i> : C	
	D: C	
	<i>E</i> : C	
	F: A	
	<i>G</i> : C	
	<i>H</i> : A	
	I. C	
	<i>I</i> : C	
	J:C	
	p.c	
	+	
13. A	A: C	8 = x
1	[ c	000/
	B: C	80%
	C, C	
	<i>C</i> : C	
	D: C	
	$\nu$ . $\varsigma$	
	E: C	
	F: C	
	G: DA	
	Н: С	
	I: IA	
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		1
	I·C	l I
	J:C	
	J:C	

14. IA	A: C B: C C: C D: C E: C F: C G: C H: C I:P J:C	9 = x 90%
15. DA	A: C B: C C: C D: C E: C F: C G: C H: C I: A J:C	9 = x 90%
16. P	A: C B: P C: C D: C E: C F: C G: C H: C I: C J:C	9 = x 90%

## Appendix I

# **Intercoder Reliability Materials**

Note: Coding legend used by coders appears in Appendix G. Sample data and contact information have been intentionally removed.

## Purpose:

Thank you for your participation in this project. You will receive a \$25 Visa giftcard as compensation for your efforts. By coding the data in this excerpt of interviews, you will help me to verify the validity of my own codes by providing unbiased information that could result if the research team were doing the testing. As a writing instructor who is not considered part of the research protocol, you will be doing an independent analysis of the data that has been collected during the study. In order to preserve participant confidentiality, names and other identifying information have been changed.

## **Directions for Coder:**

Using the following coding legend, mark the appropriate code by typing directly into the document. Mark the code exactly as it appears in the coding legend (below), typing the initials exactly as they appear. Some items may have more than one code; you may code whatever you feel is appropriate, but no response should have more than two codes.

There are a total of 25 items. Please code the data at your earliest convenience, but email me your results no later than 15 August 2011.

Feel free to contact me at [researcher's email address] or [researcher's cell phone]. Again, many thanks for your help!

Refer to the example below to help guide your responses:

D: Did you get overwhelmed in your writing course as a first year college student?

A: I did. My classes are pretty easy compared to other people's courseloads, but at the same time ... it was the transformation of being assigned little readings to having your chapters to read ... Math was pretty easy, but like, English was hard. I ... hate writing. Our teacher made us bring, like drafts of papers that were due, and another student would read my paper and like, tell me what was wrong with it. That was stupid. Most of the time I never brought in a draft anyway. If I did, the person looking at my paper B.S.'d his comments.

{(A) CODE _	(mark response here)}
	{Correct response(s): PW3, PF3}

Answer Key to Coder Response A (The coders did not see this key while coding their responses.)

Correct Response
1.PW3, KSAC2
2. KSAC1
3. KSAC1
4. KSAC2
5. PF2, KSAC1
6. PF3, KSAC1
7. PF3
8. PF1, PW1
9. KSAC1
10. KSAC1, KSAC2
11. KSAC1, KSAC2
12. PF2, PW2
13. KSAC1, KSAC2
14. PW2, KSAC1
15. PW2
16. PW2, PW3
17. KSAC1, KSAC2
18. KSAC2
19. KSAC2, KSAW1
20. KSAW1
21. AP1

Coder A Response	Correct Response
22. AP2	22. AP1, AP2
23. AP1	23. AP1
24. AP2	24. AP1, AP2
25. AP1, AP2	25. AP1
X (raw total of correct responses) = 21 % of correct responses = 84%	

Answer Key to Coder Response B (The coder did not see this key while coding their responses.)

Coder B Response	Correct Response
1. AP1	1. AP1
2. PF2, AP2	2. AP1, AP2
3. PF2, KSAC1	3. KSAC1
4. KSAC1	4. KSAC1
5. KSAC1	5. KSAC1
6. KSAC1, KSAC2	6. KSAC1
7. KSAC1	7. KSAC1, PF3
8. KSAC1	8. PF2, PF3
9. PW2	9. PF2, PW2
10. KSAC1	10. KSAC1, PF3
11. KSAC1	11. KSAC1, KSAC2
12. KSAC1	12. KSAC1, KSAC2
13. AP1	13. AP1, AP2
14. AP1	14. AP1, AP2
15. AP1, AP2	15. AP2
16. PW1, AP2	16. AP2
17. PF1, AP2	17. PW1
18. PW1, PF2	18. PF2, AP2
19. KSAW1, AP2	19. AP2
20. PF1, AP1	20. AP1
21. KSAC1	21. PW1, KSAC1

Coder B Response	Correct Response
22. KSAC1, AP2	22. PF1
23. KSAW2, AP2	23. KSAW1, KSAW2
24. KSAW1	24. KSAW1, KSAW2
25. KSAC1, AP1	25. AP1,AP2
X (raw total of correct responses) = 21 % of correct responses = 84%	

## Appendix J

## **Definitions**

The following terminology is used throughout the dissertation and was considered throughout the interpretation of data. The terminology is divided into three broad categories: Field-specific, argument-specific, and essay-specific.

## Field-Specific Definitions

Attention-deficit/hyperactivity disorder (ADHD). "A neurobehavioral disorder that is exhibited by six or more symptoms of inattention that have been present for at least 6 months to a point that is inappropriate for developmental level, or by six or more symptoms of hyperactivity-impulsivity that have been present for at least 6 months to an extent that is disruptive and inappropriate for developmental level" (American Psychiatric Association, 2000).

Unity. When a paragraph focuses on a main point: According to Hacker & Sommers (2009, p. 62), "the point should be clear to readers, and all sentences in the paragraph should relate to it."

**Coherence.** According to Hacker & Sommers (2009, p. 75), sentences and paragraphs are said to be coherent "when [they] flow from one another without discernible bumps, gaps, or shifts."

**Logic.** Hacker & Sommers refer to logical fallacies, or "misguided or dishonest uses of legitimate argumentative strategies" (2009, p. 118). The argumentative strategies

the authors discuss include generalizing, drawing analogies, tracing causes and effects, weighing options, making assumptions, and deducing conclusions (2009, pp. 118-124).

Peer writing workshop. Peer review sessions that allow students to review others' drafts in progress. These workshops allow students to be reviewers as well.

Hacker & Sommers (2009, p. 2) suggest that review sessions and deadlines work together as fundamental methods of time management.

**Feedback.** Written and oral feedback provided by other reviewers in a peer writing workshop. Feedback is manifested through global (Hacker & Sommers, 2009, p. 35) and sentence-level (Hacker & Sommers, 2009, p. 49) revisions.

**Draft.** An incomplete version of an essay. Drafting is generally considered as being part and parcel to the nonlinearity of the writing process. These stages include drafting (Hacker & Sommers, 2009, pp. 25-35), planning (Hacker & Sommers, 2009, pp. 2-25), and revising (Hacker & Sommers, 2009, pp. 35-59).

# **Argument-Specific Definitions**

**Argument.** As a stance on a debatable issue such as policy, arguments need to be reasonable; essentially, "students [need to be] taught to join a conversation with other writers and readers" (Hacker & Sommers, 2009, p. 104).

**Authority.** The support for an argument. Students often consider expert opinion to be the sole form of authority in an argumentative essay, but they need to be taught that arguments need to be constructed on their own (Hacker & Sommers, 2009, p. 494).

**Objection.** Sources that are "contrary to [the writer's own] or offer different arguments [than the writer's own]" (Hacker & Sommers, 2009, p. 494). Students need to anticipate and counter objections to lend strength to their own argument.

**Support.** The backing up of claims, or assertions, with facts and examples (Hacker & Sommers, 2009, p. 494).

# **Essay-Specific Definitions**

**Thesis.** The answer to a question that has been posed, the resolution of a problem that has been identified, or a statement that takes a position on a debatable topic (Hacker & Sommers, 2009, p. 19). A thesis needs to be supported with topic sentences and supporting details throughout the essay in which it appears.

**Topic sentence.** Related to unity, a topic sentence "acts a signpost pointing in two directions: backward toward the thesis of the essay and forward toward the body of the paragraph" (Hacker & Sommers, 2009, p. 62).

**Transition.** "Bridges between what has been read and what is about to be read" (Hacker & Sommers, 2009, p. 79).

**Organization.** Patterns that dictate the structure of an essay. Different types of organization include analogy, cause and effect, classification, comparison, contrast, definition, description, division, and examples (Hacker & Sommers, 2009, pp. 67-75).

**Introduction/conclusion.** Respectively, the opening and closing sections of an essay that serve the purpose of directing readers towards the essay's background and

context. The introduction "announces the main point" while the conclusion "drives [the main point]" home (Hacker & Sommers, 2009, p. 25).

## Appendix K

# Curriculum Template

Adapted from Morris, 2011.

# **Assignment 4 - Developing Learning Outcomes**

Following the model below (from Lesson 3.3), develop

- **one** ultimate learning outcome
- at least 3 mediating learning outcome
- at least 3 foundational learning outcomes

for a **NEW** course you would like to teach **OR** for a course that already exists but which does not follow the guidelines for learning outcomes discussed in Lesson 3 readings and Module 2 of Getting Results – the honor system works here – please choose a course that needs to be worked on, not one that is already in place.

In addition, list **at least two criteria from at least two** of Greenville Technical College's (or your home college's) College-wide General Education Outcomes (found in Lesson 3.1) that the outcomes address. Explain how each criteria will be met by the assignment

Remember, learning outcomes should be SMART and should be written using measurable verbs corresponding to Bloom's taxonomy.

Total: 80 pts

NOTE: The materials developed in Assignments 4-7 will be summarized and presented to the class for the PRESENTATION at the end of the term (you can get details about the presentation by going to Presentation in ASSIGNMENTS).

#### Model

Course: Professional Communication

#### Ultimate Outcome:

Students will write a researched recommendation to solve an on-the-job problem; students will present the recommendation in a 10-minute verbal presentation.

#### Mediating Outcomes:

#### Students will be able to

- 1. define a problem
- 2. research solutions to the problem
- 3. analyze researched solutions
- 4. design a plan to implement the best solution
- 5. explain alternative solutions to the recommended plan
- 6. justify the recommended plan
- 7. compose a memo of recommendation incorporating items 1-7
- 8. create a PowerPoint presentation incorporating items 1-7
- 9. produce and deliver a 10 minute oral summary of items 1-7

#### Foundational Outcomes:

Students will be able to

- 1. write a memo
- 2. prepare a PowerPoint presentation
- 3. produce and deliver an oral presentation

## College-wide Learning Outcomes:

Information Technology and Technological Literacy

- · Access pertinent and valid information in electronic resources
- · Apply technology tools effectively to accomplish tasks

Students will meet this outcome with electronic research, writing and sending the memo electronically, creating and sending the PowerPoint electronically.

#### Critical Thinking/Reasoning

- Define/identify a problem/issue
- · Conduct research
- Use appropriate reasoning/methods
- · Formulate conclusions/solutions
- Evaluate and question conclusions/solutions

Students will meet this outcome by defining a problem, researching solutions to the problem, analyzing researched solutions, designing a plan to implement the best solution, and explaining alternative solutions to the recommended plan.

## Assignment 5 - Developing Face-to-face lesson plans

Following the model below, create lessons using different face-to-face teaching techniques for the outcomes developed in Unit 3.

Choose any 3 outcomes developed in Unit 3 – you can choose any outcomes you wish, but this exercise might work best if you choose mediating or foundational outcomes.

# Develop a lesson for each outcome; each lesson must use a different teaching technique.

Each lesson must include the following:

- Outcome:
- Teaching Technique:
  - o what technique will be used
  - o provide specific details if a small group is used, how will the groups be formed? what will each group be asked to do? what materials will be used (what might you have to prepare or provide)? what is the product each group is to present? how long will the exercise last? etc.

Total: 75 pts

NOTE: The materials developed in Assignments 4-7 will be summarized and presented to the class for the PRESENTATION at the end of the term (you can get details about the presentation by going to Presentation in ASSIGNMENTS).

Here is an example of what the completed assignment should look like (you've seen this example before in Lesson 2.1).

Outcome 1: students will gather data and arguments for an argumentative paper.

#### **Activity:**

Students are told to bring in a thesis statement for an argumentative paper.

Classroom is rearranged so that desks are in two long rows facing each other:

$$Row\ B\quad x\quad x\ x$$

Students are given the following instructions:

• When I say "Go," the students in Row A will tell the student directly opposite them in Row B what their thesis is.

- Students in Row B verbally brainstorm the topic; students in Row A write down the brainstorming.
- After 75 seconds, I will say "Shift." Everyone in Row A moves one seat to the right (the person at the end  $(x^1)$  moves to  $x^2$ . The people in Row B do not move.
- Once in place, the person in Row A tells the person opposite in Row B his/her thesis, the person in Row B brainstorms, etc as was done in steps 1 and 2.
- After 75 seconds, I will say "Shift," and the process continues.
- · When everyone in Row A has had a chance to get brainstorming from different students in Row B, I will say "Stop."

After Row A has finished gathering the brainstorming from Row B, the class does a quick debrief about what has just happened and what it has learned. Through questioning students will come to realize that

- Some of the brainstorm items repeated that can mean that that particular information is something many in the audience will have in common and thus may or may not be useful for a paper.
- Some people in Row B may not have understood the thesis that means the writer will either have to find a new thesis or reword the thesis so that it is understandable to others.
- The people in Row B have a better idea of the breadth of topics that they could write about.

Once the debriefing is over, the entire process is repeated with the people in Row B stating the thesis and moving while the people in Row A brainstorm and remain in the same place.

The overall time devoted to this exercise depends on the number of students in class. For instance, if there are 20 students in the class, Row A will require abut 15 minutes to go through everyone in Row B. Row B will then require 15 minutes. The debriefing will take about 10 minutes and giving the directions will take 5 minutes all for a total of 45 minutes.

## Assignment 6 - Developing lesson plans that includes an electronic component

Following the model below, create a lesson using a teaching technique that includes an electronic component for one of the outcomes developed in Unit 3

Choose any one outcome developed in Unit 3 – you can choose any outcome you wish, but this exercise might work best if you choose a mediating or foundational outcome.

Develop a lesson for the chosen outcome using an electronic resource or technique; this technique must be something that you are not already using in a class and cannot be a YouTube clip or PowerPoint (unless it is an interactive PowerPoint).

The lesson must include the following:

- Outcome:
- Teaching Technique and electronic resource:
  - what technique will be used
  - provide specific details which technique will be used? which electronic resource will be used (Give address, etc. so the source can be accessed)? how will it be used? etc.

Total: 30 pts

NOTE: The materials developed in Assignments 4-7 will be summarized and presented to the class for the PRESENTATION at the end of the term (you can get details about the presentation by going to Presentation in ASSIGNMENTS).

Here is an example of what the completed assignment should look like (you've seen this example before in Lesson 2.1).

Outcome: students will be able to write a memo using appropriate tone and format and including specific details.

Purpose of the class: students have been introduced to memo writing, audience analysis and tone. They will be writing a memo in the next class period. The purpose of this class is to give students practice in revising, editing, and writing memos.

Begin the class by giving the class an overview of the day's activities; then a PowerPoint slide listing the activities step by step is presented.

Activity: students are put into groups; each group is assigned a poorly written memo to revise.

1. Students read the memo

- 2. Working silently and by themselves, students write down 4 changes that need to be made to the memo (Time 5 minutes)
- 3. Working in groups, students discuss the changes they've noted and revise the memo (Time 10 minutes)
- 4. Upon completion of the revision, one student in the group reads the original memo to the class; a second student summarizes the errors; a third student reads the revised memo (students are called on randomly to take these parts this assures accountability and participation by all group members) (Time 5 minutes)
- 5. Each group then watches a short clip from youtube.com. "How Not to Change a Tyre" http://www.youtube.com/watch?v=JtGwkyTqubw. The clip demonstrates three different people doing wrong things when that change a tire. Each group is assigned one person from the clip and is told they are the safety committee for a company and the person on the clip has done this stupid action on the job. The group is to create a memo giving a step by step explanation of how the action the person in the clip should be done correctly (Time 15-20 minutes)
- 6. Upon completion of the memo, one student in the group summarizes the action in the clip to the class; a second student explains why the action is wrong; a third student reads the memo (again, students are called on randomly to take these parts this assures accountability and participation by all group members) (Time 5 minutes)

# Assignment 7 – Assessing student learning

Using one of the lesson plans developed in Assignments 5 or 6 design **one** way you can measure students' mastery of the outcome the lesson addresses.

- 1. state the outcome
- 2. provide the lesson plan
- 3. develop an instrument (test questions, demonstration, website creation, written assignment, etc) to assess students' learning/mastery of the outcome
- 4. develop scoring mechanism (like a rubric, for instance) for the instrument
- 5. explain the strengths and weakness of this assessment method and explain why this method was chosen

Steps 1 and 2 can be cut and pasted from Assignments 6 or 7.

Assignments 1-8 for this course are models for steps 3 and 4 of this assignment.

Total: 30 pts.

NOTE: The materials developed in Assignments 4-7 will be summarized and presented to the class for the PRESENTATION at the end of the term (you can get details about the presentation by going to Presentation in ASSIGNMENTS).

## Assignment 8 – Assessing teaching effectiveness

Develop a plan for assessing teaching effectiveness. The plan must include 3 different methods of assessing effectiveness. The plan **may not use** formal student evaluations, department head evaluations or peer evaluations. For each of the three methods you should include the following:

- state the method
- provide specific detail of how and when the method would be implemented or the data gathered
- what are the strengths and weaknesses of this method?

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