VIRTUAL ACADEMIC COMMUNITY: ONLINE EDUCATION INSTRUCTORS' SOCIAL PRESENCE IN ASSOCIATION WITH FRESHMAN COMPOSITION STUDENTS' CRITICAL THINKING AND ARGUMENTATION

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Paige Fuller Paquette

Certificate of Approval:

Barbara Ash Associate Professor Curriculum and Teaching	Alyson Whyte, Chair Associate Professor Curriculum and Teaching
Margaret E. Ross Associate Professor Educational Foundations, Leadership, and Technology	Michelle Sidler Associate Professor English
Sara Wolf Associate Professor Educational Foundations, Leadership and Technology	George T. Flowers Dean Graduate

VIRTUAL ACADEMIC COMMUNITY: ONLINE EDUCATION INSTRUCTORS' SOCIAL PRESENCE IN ASSOCIATION WITH FRESHMAN COMPOSITION STUDENTS' CRITICAL THINKING AND ARGUMENTATION

Paige Fuller Paquette

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VIRTUAL ACADEMIC COMMUNITY: ONLINE EDUCATION INSTRUCTORS'

SOCIAL PRESENCE IN ASSOCIATION WITH FRESHMAN COMPOSITION

STUDENTS' CRITICAL THINKING AND ARGUMENTATION

Paige Fuller Paquette

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DISSERTATION ABSTRACT

VIRTUAL ACADEMIC COMMUNITY: ONLINE EDUCATION INSTRUCTORS' SOCIAL PRESENCE IN ASSOCIATION WITH FRESHMAN COMPOSITION STUDENTS' CRITICAL THINKING AND ARGUMENTATION

Paige Fuller Paquette

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(B.S., University of Alabama, 1994)

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There is much literature addressing challenges face-to-face freshman composition instructors encounter in developing college courses that foster critical thinking skills crucial to developing written argument. Composition instructors may face challenges in teaching students that writing is a means of making meaning, there are many different methods of thinking and writing, and intellectual growth occurs when students are encouraged to use higher levels of thinking that push them beyond their normal thinking yet do not push them beyond their present abilities (Berlin, 1987; Berthoff, 1984; Lindemann, 1982). There is a gap in the literature on freshman composition, however, regarding students' using critical thinking skills to develop an argument during online composition courses. Because of this gap in the literature, composition instructors may

need training and practice with feedback to create opportunities for freshman composition students to think critically and to develop high-quality arguments online (Palloff & Pratt, 2007). Researchers in online education have documented a relationship between critical thinking and social presence (i.e., online participants' perceptions of one another as real individuals in a shared space) (Tu & McIsaac, 2002). More recent researchers characterize social presence as an action, and they have suggested that the use of social presence cues may increase the incidence of critical thinking in the online course environment (Rourke, Anderson, Garrison, & Archer, 1999; Wise, Chang, Duffy, & Del Valle, 2004).

The purpose of this study is to investigate whether online instructors' use of social presence cues affects students' demonstration of signs of critical thinking and argument development across multiple online freshman composition classes.

In this study I found that the situational treatment instructors used more social presence cues in the posttraining segment of the study than they did in the pretraining. The discussion board postings and the essays were scored based on the Guide to Rating Critical and Integrative Thinking (GRCIT). In both the cognitive and situational treatments, the essay achievement scores increased after the training. An unexpected finding was that discussion board achievement scores decreased after training for all four participating instructors. After testing the hypotheses, I found that the incidence of social presence cues is not a predictor of students' achievement scores.

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I must start by thanking God for being true to His promises and constantly reminding me that His plan for me is to prosper me and to give me hope and a future (Jeremiah 29:11). It is only because of His great love and His greatest gift, Jesus Christ, that I have become who I am today.

I am so thankful for the opportunity to have worked with my committee chair Dr. Alyson Whyte. *Alyson,* thank you for seeing more in me than I could see in myself. I also want to thank the other members of my committee, Dr. Barbara Ash, Dr. Margaret Ross, Dr. Michelle Sidler, and Dr. Sara Wolf, for their encouragement and support. To Dr. John Carvalho, I say thank you for being both my outside reader and my "Barnabas" on this journey. Where would I be without ALL of my supportive friends? To my friend, April, thank you for boldly going before me, and thank you most of all for walking beside me and being such a dear friend. To my cheerleader, Ashli, you built this buttercup up when I was really let down! To my loving parents, it is because of all that you both are that I am who I am. I share this accomplishment with both of you. And, finally, to my husband Steve, when you married "Auburn and me," I know you had no idea what that would entail, but I am thankful for your dependence on God to provide you with the ability to be my husband, my rock, and my very best friend. Now, we leave the Auburn part to someone else and walk away hand-in-hand to the future that God has waiting for us.

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CHAPTER I. INTRODUCTION TO THE STUDY

Statement of the Problem

A 2006 panel commissioned by then U.S. Secretary of Education, Margaret Spellings, stated that many college students are graduating without acceptable literacy skills. In the final version of the report to the Secretary of Education, the Spellings Commission cited statistics from the National Assessment of Adult Literacy (NAAL) reporting that the percent of U.S. college graduates who tested proficient in prose literacy skills had decreased from 40% to 31% over the decade between 1992 and 2003 (The Secretary of Education's Commission on the Future of Higher Education [SECFHE], 2006).[1] According to the NAAL, this assessment required participants to demonstrate comprehension of information they read in the form of texts and documents. The test consisted of 152 questions, 65 of which were taken from the 1992 assessment for comparison. In order to compare the results between the two assessments, researchers rescaled the 1992 results using the criteria and methods by which the data was collected for the 2003 assessment (Kutner, Greenberg & Boer, 2005).[2]

This Spellings Commission asserted that the reported lack of proficiency in these critical skills has implications for graduates' performance in the workplace. While discussing the percentage of college students who are graduating with less than the average reading proficiency scores, the commission refers to frequent employer reports to

institutions of higher education, referring to new graduates' lack of preparation or ability to think critically and reason in the workplace today (SECFHE, 2006). The commission recommended to the Secretary of Education that postsecondary education rectify this purported deficiency.

The American Association of University Professors (AAUP) has stated that it also recognizes the pivotal responsibility that higher education maintains in developing the knowledge and skills required in the workplace. However, the association displayed concern that the federal commission portrayed higher education as an extension of the national labor market rather than as an institution of higher learning ("AAUP Statement," n.d.). The Modern Language Association (MLA) has remarked that although the commission's findings on lack of student preparation or ability to think critically are important, the perceived condition has existed in higher education for many years ("Comments on Spellings Commission," 2007). Although the Spellings Commission may have narrowed the definition of higher education and reintroduced a lingering problem, though, the condition remains that the federal government has now identified the issue of students leaving college without high-quality reading, academic writing and critical thinking skills as one to be addressed in undergraduate programs nationwide. The Spellings Commission recognized that although this mandate is challenging for all areas of education, it is an even more formidable challenge for colleges that provide distance education opportunities (SECFHE, 2006).

Distance education, which can accommodate undergraduate students without requiring their attendance in a face-to-face classroom, historically began as a correspondence form of study. Information was often transferred through the mail,

largely depending on the written word (MacKenzie, Christensen, & Rigby, 1968). As technology has progressed, distance education has become simultaneous as well as asynchronous. In some cases, distance education has also become multimodal, incorporating audio, visual, and written communication (Brown, 2001; Palloff & Pratt, 2007; Rourke, Anderson, Garrison, & Archer, 1999; Swan, 2001; Wise, Chang, Duffy, & Del Valle, 2004). Students are able to have interactive experiences in their courses by viewing work and comments by other participants in online course systems such as Blackboard or WebCT. Students may use emoticons, such as smiley faces :O), as a way to communicate gestures with others during these online textual interactions. Students may often communicate with the instructor and with one another through chat rooms, e-mails, and discussion boards. At times students may communicate through video teleconferencing. Today, distance education is often synonymous with the term online education because many of the institutions that offer this form of education do so via the Internet. Even with these technological advances, though, there may be challenges for instructors (who are typically also the course designers) that limit students' use of critical thinking within these virtual environments.

Even before the 2006 recommendation from the Secretary of Education, there was a drive to develop face-to-face freshman composition college courses that foster critical thinking skills crucial to developing written argument (Berlin, 1987; Berthoff, 1984; Lindemann, 1982). There is a gap in the literature, however, regarding students' using critical thinking skills to develop an argument in online composition courses. Although the literature on freshman composition courses addresses the use of technology within an on-campus classroom, there is a dearth of literature on the topic of teaching critical

thinking and argumentation by means of online freshman composition courses. With composition researchers and educators eluding acknowledgement of the online educational movement in higher education, there is a lack of research and pedagogical literature on online freshman composition instructors' enhancing these students' critical thinking and argumentation skills.[3] Instructors may need training and practice with feedback to create opportunities for freshman composition students to think critically and to develop high-quality arguments within their online courses not only in the written essays that students submit but in other areas of communication such as email and the discussion board (Palloff & Pratt, 2007).

Because of the multimodal capabilities of current course-delivery technology, online instructors in all disciplines, including freshman composition, are being called upon to find ways to move their online courses from the historical correspondence approach where students typically work in isolation, sensing a noticeable separation from other students and the instructor, to a communal approach that encourages students to join with the instructor by investing in one another's participation in the course. The instructors' and students' perceptions of one another as individuals inhabiting the shared space of the online course is known as *social presence* (Tu & McIsaac, 2002). Much of the early research on social presence during the 1990s is based on students' reported perceptions, including students' reported awareness of and satisfaction with interaction with other students. However, more recently, researchers such as Rourke and his colleagues (1999) have also begun to describe social presence as an *action* taken by participants to create this connection to others. Researchers have further documented a relationship between social presence and critical thinking. This connection between a

communal online environment where participants both recognize and act on the presence of others- including extending one another's critical thinking- may be one avenue toward fulfilling the U.S. Secretary of Education's mandate to advance students' critical thinking skills in all online courses. This dynamic is relevant to the field of online freshman composition as online instructors seek to fulfill the requirements of a face-to-face course in a virtual environment.

CHAPTER II. LITERATURE REVIEW

Early Distance Education

In the late 1800s, the early forms of distance education were correspondence courses during which students mailed their work to a teacher, the teacher graded the work and commented on it, and then the teacher mailed the work back to the student (United States, 2008). In their book, *Correspondence Instruction in the United States*, MacKenzie, Christensen, and Rigby (1968) discuss opportunities that this form of education provided for students who were unable to attend classes in a face-to-face setting.

Correspondence courses depended mostly on the written word. These courses centered on student-teacher interaction punctuated by long waits between messages. In their recollection of the history of correspondence education, MacKenzie, Christensen, and Rigby (1968) never mentioned conversations between the correspondence students and the instructors. The authors reported that all instructor feedback was written on the students' work or in some other evaluative format. These authors made a statement that would resonate throughout distance education when they wrote, "Without instructor feedback, there can be no real instruction." More than 40 years later, instructor feedback is central to online instruction, a more recent form of distance education.

MacKenzie, Christensen, and Rigby (1968) acknowledged shortcomings of correspondence study that are still often mentioned in the literature on distance education today. The authors asserted that geographical separations between instructors and students often led to instructional problems, including that these distances often left students feeling isolated and detached. Correspondence study removed any cordial or personal interaction between the instructor and the student, because the most common medium of exchange was through the postal service. This was often an impersonal and unproductive form of communication.

One of the most important aspects of distance education that was lacking in correspondence study was student-to-student task-related and social interaction. Mackenzie and his co-authors recognized that exchange of information and possible collaborative construction of new knowledge among peers could enhance students' overall course experiences. MacKenzie and his co-authors proposed that students often learn through class discussions, debates, and other classroom interactions; these are other elements absent in correspondence study. Although many students were able to take courses through correspondence study, the authors recognized that the lack of participant interaction was a major issue to be addressed (MacKenzie et al., 1968).

Interaction

With the advancement of electronic and computer technologies in the mid-twentieth century, opportunities for students to partake in distance learning began to increase, and even with what would now be considered antiquated technology, such as video and audio lectures, communicating and interacting with other course participants became possible. Michael Moore's writings on distance learning have become

foundational in the field of online learning. Moore has been documenting changes in distance education for over 30 years. In his early writings, Moore (1973) suggested that the instructor of a distance education course is vital to participant interaction.

Over 20 years later, Moore and Kearsley (1996) continued the emphasis on the instructor's importance in distance education. In their book, *Distance Education: A Systems View*, the authors acknowledged challenges that instructors face in what Moore (1973) termed *distance teaching*. Moore and Kearsley (1996) recognized that distance education teachers often struggle with not being able to receive or provide immediate feedback in courses, with their successes being dependent on their technological capabilities, and with identifying ways to support distance students both motivationally and substantively.

Almost 25 years after Moore stressed the importance of *interaction*, there is still not consensus in the field on a definition of the term. Rather than providing a definition, many authors and researchers refer to Moore's typology of three types of interaction. As a practitioner, Moore (1989) recognized three types of interaction in classes taught at a distance: learner-content interaction, learner-instructor interaction, and learner-learner interaction. Moore argued for the import of each of these types of interaction during an online course and the instructor's responsibilities to create an environment in which these forms of interaction may occur.

In the literature on distance education in its most widespread form today, online instruction, Moore's emphasis on the instructor's role in relation to the presence of interaction in the course has persisted. In their conceptual system titled "Engagement Theory," Kearsley and Shneiderman (1999) suggested that in order for student

engagement to occur, instructors must actively involve students in learning activities by promoting interaction with other participants within the online course. Based on the literature reviewed here, one might define *interaction* in the context of distance education as an exchange of resources, personal or content related, between two or more participants within an online course, which may or may not result in the construction of new knowledge.

Collaboration

Palloff and Pratt (2005), authors and practitioners in the field of online education, suggested that instructors should create more than just opportunities for students and instructors to interact on an individual basis. They recommended that instructors create courses designed for collaboration. Although Palloff and Pratt did not operationalize online collaboration, they did suggest several benefits of *collaboration* based on the practitioner literature. Palloff and Pratt (2005) suggested that online collaboration can encourage students to think more deeply, both elaboratively and critically. The authors also noted that online collaboration may lead students to create shared learning goals, address different learning tendencies, and accommodate cultural differences. Developing a definition from the benefits, the authors suggested that *collaboration* may be defined as a form of interaction in which participants, voluntarily or by mandate, engage in group activities to construct knowledge.

Palloff and Pratt (2005) suggested that collaboration among the participants in an online course may enable the students to recognize participants (other students and the instructor) as real people and not merely words on a screen. This perception of connectedness, awareness of others, and/or a sense of intellectual community that

participants experience in an online course through various forms of interaction and collaboration is referred to as *social presence*. Gunawardena and Zittle (1997), foundational researchers in the social presence literature, credited social presence for student satisfaction in many distance education courses. This sense of social presence, the connectedness which allows participants to experience satisfaction with a course and feel as if they are a part of something bigger than themselves, these authors suggested, may be an important concept in research to develop empirically grounded approaches to distance education course design.

Social Presence

Many researchers have based their definitions of social presence on Short, Williams, and Christie's (1976) foundational description of *social presence* in a face-to-face classroom, which described to what degree people are perceived as being real by the other participants in a course (Gunawardena & Zittle, 1997; Richardson & Swan, 2003; Swan, 2001; Wise, Chang, Duffy & Del Valle, 2004). Building on this earlier definition, Tu and McIsaac (2002) generated a definition specific to online courses which suggested that social presence is the recognition, and possibly acknowledgement, of another intellectual individual in the computer-mediated communication (CMC) environment. Tu and McIsaac described this form of recognition as a "feeling, perception, and reaction."

Two Aspects of Social Presence

There are two distinct ways that social presence has been conceptualized. One conceptualization views social presence as the perceptions or recognition that other actual people are also involved in the online course (Richardson & Swan, 2003; Swan & Shih,

2005; Tu, 2001, 2002; Tu & McIsaac, 2002; Wise, et al., 2004). That is, social presence is conceptualized as being *perceived* in the course of participant interactions and collaboration within an online environment. The second way that social presence has been conceptualized is not as perception, but as *action*. Recently, researchers have described social presence as the moves that participants make to project themselves socially and academically into the online classroom. This conceptualization of social presence is not about what the participants sense, both students and the instructor, but about what they do (Rourke et al., 1999; Wise, Chang, Duffy, & Del Valle, 2004).

Instructors and Social Presence

In terms of research, the field of online education is still emerging as a coherent area of inquiry. Much of the literature addresses course design but without reference to the actions instructors should perhaps carry out. Several researchers propose that it is the instructor's responsibility to develop activities that promote social presence and to encourage, maybe even insist, that participants actively engage in these activities to cultivate the interactions and involvement that are crucial to this environment (Gunawardena & Zittle, 1997; Swan & Shih, 2005; Tu, 2001, 2002; Wise et al., 2004). A vast amount of experiential literature on instructors' practices, successes, and challenges is available, but as Maurino's (2007) review of literature documented, there is little scholarly literature reporting empirical research on course implementation. The experiential literature suggested most students will not spontaneously engage with others enrolled in an online course. Therefore, although so far there has been little systematic testing of the recommendations in the practitioner literature for actions instructors should take in online environments, there is consensus in the scholarly literature about occasions

through which participants may act in order to introduce social presence into an online course.

One of the few scholarly studies that emphasizes the instructor and the sense of social presence he or she develops during an online course is Wise and her colleagues' (2004) quantitative study of a blended course, one that meets in class on occasion but mainly is taught online. Using a social presence indicator scale previously developed by Rourke and his co-authors (1999), the researchers selected eight social presence cues to increase the level of social presence within one of the courses in the study. The eight cues are "expressing humor, exhibiting emotions, providing self-disclosure, interjecting allusions to physical presence, using greetings, addressing people by name, complimenting others' ideas, and offering support or agreement for an idea."

The study involved four instructors, all experienced, and twenty students. Each instructor was randomly assigned a group of five students each, and the instructor was directed to demonstrate low levels of social presence or to demonstrate high levels of social presence for the duration of the course. Instructors were trained in ways to manipulate the eight social presence cues, and they were reminded that the quality of their interactions should remain high; only the amount of social presence might be changed. Many of the instructors in the low social presence treatment struggled to refrain from inserting social presence cues into the interactions with the low social presence groups. This could be viewed as flaw in the study because the instructors in the control group knew that social presence was being studied and chose to use it anyway.

A survey instrument was developed and administered to measure student perceptions of the course (Wise et al., 2004). The study reported that the students in both

treatments perceived the instructors' messages as friendly; however, the students in the higher social presence treatment reported more instructor friendliness. The researchers hypothesized that if social presence was perceived, the students in the high social presence treatment would write longer messages than those in the lower social presence treatment.

The findings validated the theory in that the students in the high social presence group wrote messages twice as long as those in the lower social presence group. The researchers also found that the students in the higher social presence treatment exhibited more social presence cues in their replies to the instructor than those in the other treatment. An unexpected finding in the study was that although the higher social presence cues influenced the students' perceptions of the instructor, there were no significant findings that demonstrated an effect on perceived learning. Therefore, the study concluded that social presence affects the environment produced by the course, but it might not make a significant difference to students' perceived learning. The researchers suggested that although the results of this study furthered research on social presence in online course environments, the small number of participants was a limitation (Wise et al., 2004).

Social Presence Cues

Adopting the concept that social presence is an action and something course participants—in this case instructors—can do to project themselves into the class, I recognized a clear distinction among the eight social cues and divided them into two categories (Figure 1): *revealing the instructor* and *recognizing the participants* (Rourke et al., 1999; Wise et al., 2004). Four of the social presence cues can be categorized as

those that reveal the instructor. An instructor's expression of his or her sense of *humor* in an online course environment allows the students to see that the instructor has an individual orientation to what, in the context of a course in an educational institution, is humorous to state to his or her students. The instructor's expression of his or her sense of humor interjects the instructor's presence into the social space of the online course. The instructor's exhibition of *emotions* also creates a better sense of a real person as he or she may express feelings through words, by using emoticons :O), or with capitalization and punctuation. *Providing self-disclosure* about life outside of the classroom is another way in which instructors are able to indicate that they are an individual human presence. Finally, *interjecting allusions of physical presence* (using words like *we* or *our class*,) may suggest the instructor's *physical presence* and thus make the participant feel connected to both the instructor and other participants.

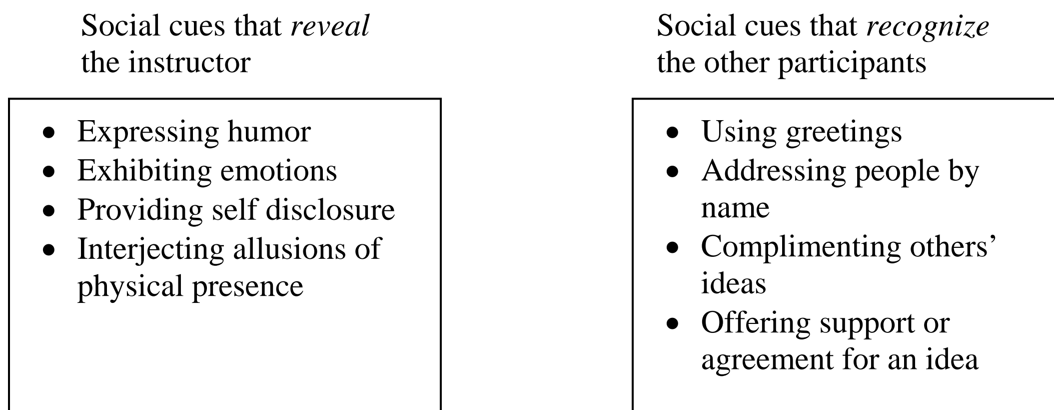


Figure 1. Two categories of social presence cues (Adapted from Rourke, Anderson, Garrison, & Archer, 1999 and Wise, Chang, Duffy, & Del Valle, 2004).

The other four social cues may be described as those that recognize the other participants. *Using greetings* in exchanges creates an awareness that the course is a social space. *Addressing people by name* in communications indicates a sense of the importance of each student that can remind other participants that there are actual people participating in the course. *Complimenting of others' ideas* for specific features might encourage the individual student to have a sense of relatedness to the instructor both increasing the likelihood of that student continuing the positive actions and making the individual student aware of the student who is being complimented, and, collectively, each student more aware that other students taking the course are human individuals. *Offering support or agreement for an idea* signals to participants that the instructor is reading comments and participating in the class, and it makes the participants aware of the instructor's responses to them as individuals and helps them see others in the class as individuals as well.

Positive Online Communities

The demonstration and recognition of social presence are two ways of developing an online environment in which students are encouraged to state ideas, elaborate on others' thinking, and criticize one another's reasoning. When students recognize that the other students in an online course are actual people with various backgrounds but often similar interests, social and intellectual connections may form. It is through this feeling of connectedness—of realizing that the other students in the class and also the instructor often have similar desired outcomes for the course—that a sense of community can develop among the participants.

Foundational researchers on this concept of sense of community McMillan and Chavis (1986) defined a sense of community as the *feelings* of belonging, security, and trust that members may experience as part of a group. Developing their concepts about sense of community in online education communities from those of McMillan and Chavis, Palloff and Pratt (1999) explained that an online education community may be formed due to participants' desires for connectedness. *Connectedness* implies a sense of camaraderie, trust, and confidence in others that is similar to the subprocesses in the McMillan and Chavis definition. An online community is a group of participants who are brought together in an online classroom environment to interact, exchange ideas, and collaborate in order to gain a knowledge and understanding of the subject matter, of the course, and of how the subject matter and course pertain to their lives (Hiltz, 1998; Kwoch & Schweir, 1997; Palloff & Pratt, 1999; Tu & Corry, 2002; Shea, 2006).

Social learning theorist Etienne Wenger (n.d.) narrowed the definition of this concept of community when he explains the term *community of practice (COP)*, which was developed by anthropologist Jean Lave and Wenger when studying apprenticeships. Wenger distinguished between a commonly recognized definition of community being a group of people who live nearby or spend time together and the definition of a community of practice. He suggested that the significant difference is that in a COP the members usually share common concerns, goals, passions, and interests. Wenger (n.d.) proposed that students can learn from one another as they interact and a community of practice is formed.

Wenger recognized three distinct characteristics that must be present in order for a community of practice to exist. He stated that a community of practice must include the

domain, the community, and the practice (Wenger, n.d.). Alluding to *domain* as a situation of life, Wenger suggested that a community of practice should have a distinguishing identity due to the commonalities of those, who are the participants (students and the instructor) in this environment.

In the common domain, participants in a COP should interact and participate in activities and discussions that allow opportunities to help others and share information (Wenger, n.d.). The author described a COP as more than just a collection of participants with common interests. Rather, the COP consists of *practitioners* in the common domain. Members of a community of practice often hold an abundance of resources such as life stories, knowledge tools, and previous practical experiences. This form of practice is developed through participants sharing, interacting, and learning from each other. Many times participants are not even aware that a community of practice has been developed (Wenger, n.d.). Participants only may recognize that they are one of several individuals present in a comfortable and informative environment.

In their second edition of *Building Online Learning Communities*, Palloff and Pratt (2007) referred to Wenger’s concept of the COP as they build their own argument for the importance of developing online learning communities. Palloff and Pratt recognized learning communities as being more than just social connections; they suggested that learning communities are positive environments in which participants are comfortable discussing content, exchanging thoughts, sharing related life experiences, and collaboratively constructing new knowledge.

Palloff and Pratt (2007) discussed the importance of participants expressing some of their feelings as well as their thinking in order to develop a sense of connectedness to

other participants in the course. Expression of personal characteristics and traits, developing a sense of social presence among participants, may contribute to feelings of safety and trust within the environment of an online course. This sense of trust can provide an atmosphere in which participants may freely express their thinking, and Palloff and Pratt (2007) suggested that when this sense of trust grows among participants, students often go to classmates for feedback and advice rather than the instructor. This newly developed, student-centered atmosphere enhances the online learning community as a community of practice. Like Wenger, Palloff and Pratt (2007) emphasized the development of community that is comfortable as well as informative, and the authors state that the efforts to create this environment are critical to the success of an online learning environment.

Social Presence and Online Courses as Communities of Practice

Much of the empirical data on social presence, defining it as the recognition that other actual people are in the environment, measures its significance through student satisfaction and perceived learning. That is, most of the empirical studies of online communities operationalize social presence by surveying students regarding their perceptions of social presence, their perceptions of their levels of learning, and their levels of satisfaction with online courses. However, there are some studies which operationalize the effectiveness of online communities of practice.

Gunawardena and Zittle (1997) are foundational researchers in the literature on social presence. Many other researchers refer to their study, which investigated social presence as a predictor of learners' overall satisfaction in a computer conferencing environment. Gunawardena and Zittle (1997) used a Likert scale questionnaire to gauge

50 graduate students' perceptions of participating in a computer-mediated environment where they interacted with graduate students from other universities, sharing and discussing research findings. The researchers found that the relational aspect of CMC (computer mediated communication), an early form of online education, is important to overall satisfaction. Realizing that there are limitations upon participants' relational interactions, the researchers studied specific forms of these interactions. An example that the researchers examined was that of the participants using emoticons, such as :O). Through their study they found that where there are reports of low levels of social presence, the use of emoticons is not associated with student satisfaction at a level that achieves statistical significance. In those situations in which a higher level of social presence is reported, the use of emoticons does relate to student satisfaction. Therefore, even in the early stages on online education, social presence, including the use of the cue of emoticons, was found to be associated with students' satisfaction.

Basing their studies on the foundational work of Gunawardena and Zittle (1997), many other researchers have found that perceived social presence predicts student *satisfaction* with and *perceived learning* during distance education courses.[4] Students who report higher levels of perceived social presence report higher levels of learning satisfaction (Richardson & Swan, 2003). Students who report a higher level of perceived social presence participate more, offering longer messages and more content (Wise, Chang, Duffy, & Del Valle, 2004). In their study on social presence in a CMC environment, researchers Swan and Shih (2005) reported that students who perceive higher levels of social presence in their courses project themselves more in the course as well. The researchers found that students who recognized the instructor's efforts to

establish higher levels of social presence also recognized the instructor's efforts to create a sense of community. The studies reviewed here, when considered together, document that the level of social presence that students report is associated with students' participation in online course environments, with students' perceived learning, and with students' reported satisfaction with online courses.

Swan (2001) best demonstrated that there are correlations between perceived social presence and perceived community as she provided both a quantitative study, focusing on interaction and discussion, and a qualitative study, concentrating on community. The students Swan studied reported satisfaction with the course, their peers, and their instructor and higher levels of perceived learning in association with the extent to which they interacted with one another during an online course. Swan found that many students reported that, based on both positive and negative online experiences, they recognized the importance of having high-quality discussion.

It is my personal experience as an online composition instructor at Troy University, Alabama, that many of my online learning students are not typical college students; they are lifelong or adult learners who are returning to college after many life experiences. Many adult learners may be like my online students, who are juggling work, a family, and school. These students want their discussions with other participants to relate to the course requirements and not simply provide a means of social communication that may not relate to their success in the course. High-quality discussions may be present in connection with the sense of social presence and connectedness that students experience. It is this type of interaction during an online

course that is an important correlate of a learning community as defined in the online education literature (Swan, 2001) and of a community of practice of course participants.

Social Presence as a Perception and Action in Online Communities of Practice

Swan (2001) and Brown (2001) referred to similar aspects of social presence in their studies on building online course communities. Swan's (2001) mixed methods study focused both on correlations between features of course design and student satisfaction and on analyzing student discussions for students' sense of others' presence in their courses. Swan defined social presence as a perceived sense of presence or realness of others, and she analyzed the qualitative data based on the three indicators determined by Rourke and his colleagues (1999): *affective* (expressive behaviors that communicate emotions, thoughts, and beliefs through emoticons, humor, or sharing personal information), *cohesive* (verbal immediacy behaviors that help maintain a group mentality), and *interactive* (responsive behaviors, such as acknowledgement, agreement/disagreement, and advice, that provide evidence that others are attending, enable communication among participants, and connect individual postings into current discussions). Swan found that affective immediacy indicators such as paralanguage, features of text that help convey emotion, were the most prevalent affective indicator demonstrated; there was not much indication of cohesive indicators in the data.

Brown's (2001) qualitative research lends itself to the possibility that social presence could be an action taken by participants in a class to project a sense of themselves into the class. Brown found that as the participants of her study described their concepts of community, many of them described a community in terms of action, because they referred to being responsible for promoting their own learning and that of

their classmates. Although Brown never referred to the term social presence in her study, her findings included many related qualities such as participants interacting both inside and outside of the class assignments, participants sharing emotions, and participants mentoring others. Similar to Swan's findings (2001), Brown's (2001) qualitative analysis listed fifteen characteristics necessary for building a community among adult learners.

Suggested Actions for Building a Community of Practice during an Online Course

Brown's (2001) characteristics may be consolidated into three aspects of an online course that may enhance the formation and maintenance of a community of practice: course and student *orientation*, student *accommodation*, and student *association*. Course and student *orientation* includes students becoming comfortable with technical aspects of the course, determining what they know about the course subject, and finding similarities with their classmates through online interactions and discussions. Student *accommodation* provides for students' needs by offering opportunities for constructive interaction and, therefore, social presence; finding ways to validate each student's importance in the course; and helping students to determine the time requirements and commitment that participation in the online community will require.

Brown's (2001) third aspect of building an online community was student *association*, which includes developing course and long-term friendships, experiencing trust and respect among the students enrolled in the course, participating in online discussions as a member of a community of practice, and encouraging others to participate also. These aspects of interaction, which overlap with building an online community of practice, contribute to both earlier and present research that argues that

participant interaction, discussion, and social presence are important elements of online learning community (Gunawardena & Zittle, 1997; Rovai, 2007).

Social Presence and Signs of Critical Thinking

In his article synthesizing the theoretical and research literature on facilitating online discussions, Rovai (2007), a researcher known for his study of online communities of practice, made a reference to Gunawardena and Zittle's foundational social presence study. Rovai suggested that one way of facilitating online discussions is to use social presence. By creating a comfortable environment in which students feel they belong, the instructor may also promote a safe area in which students may demonstrate more critical thinking among the community's participants.

Given the U.S. Secretary of Education's Future of Higher Education commission's call for postsecondary schools to increase students' critical thinking skills, the relationship between social presence and critical thinking skills or argument development in online freshman composition courses may pertain in the arena of federal education policy. Just as social presence may be recognized as both something a participant perceives and something one does, in their theoretical article discussing critical thinking and distance education, Garrison, Anderson, and Archer (2001) recognized critical thinking as being both a process and an outcome. Although in their more recent work the researchers did not provide a definition for critical thinking, they did mention that their research group's focus was on "developing a means to assess the nature and quality of critical, reflective discourse that occurs within a text-based [electronically mediated] educational environment" (Garrison et al., 2001).

In their training article for adult educators, Jones and Safrit (2004) characterized those who think critically and the process of critical thinking. Jones and Safrit suggested that critical thinking can be an internal action of challenging oneself by analyzing one's own thoughts and those of others and recognizing a variety of solutions to the problem at hand. These internal actions are an alternative of imagining and comparing various outcomes. The seven dominant characteristics of a critical thinking that these trainers listed in their article may be synthesized into four characteristics: being *innovative*, *thoughtful*, *openminded*, and *factual*.

In their research on social presence, critical thinking, and distance education, the research group of Garrison, Anderson, and Archer (2000) developed the *community of inquiry* model that is grounded in the critical thinking literature. This model posited that higher-order learning, critical thinking, occurs when *cognitive presence*, *social presence*, and *teacher presence* are all in place within a CMC course (Garrison et al., 2001; Rourke et al., 1999). *Cognitive presence* allows participants to recognize a question, explore the question, gain a better understanding, and develop new perspectives through communication with others recognized as being present in the community of inquiry (Garrison et al., 2000). *Social presence* has been discussed previously, but Garrison and his colleagues (2000) elaborate on the importance of social presence for critical thinking to provide opportunities for emotional expression, free exchanges of thoughts, and access to others' ideas that are important for developing an understanding.

Garrison and his colleagues (2000) considered *teacher presence* to be a bridge between cognitive and social presence. These authors asserted that teacher presence must be in place in order for the other two aspects of community to successfully manifest in a

course. Any participant in the course may demonstrate characteristics of teacher presence, but commonly it is the instructor on whom the participants rely for the necessary experiences (Garrison et al., 2000). Teacher presence encompasses the design of the course; development of an environment in which participants feel safe to share, agree, and disagree; and the facilitation of discussion forums to encourage participants' construction of understanding. The researchers recommended what sounds like a fairly teacher driven form compared to one that is purely constructivist and an individual learning trajectory. By designing a course as it is described above, the instructor may also set a foundation for students to construct their own meanings and understandings through interactions with other participants, the instructor and students, in the online class.

Through various studies, Garrison's (2001) research group has concluded that a community of inquiry that successfully implements cognitive presence, social presence, and teacher presence may promote critical thinking. Recognizing critical thinking as an outcome is not difficult in that it may, under some circumstances, be expressed, and this expression may be observed. Garrison and his colleagues (2001) contended, though, that critical thinking as an outcome may be described not only as the expression of the skills and abilities required within a specific content but also as acquisition of a general understanding of the process of critical thinking. These researchers thus characterized critical thinking not only as something that participants do, sometimes in publicly expressed form, but also as something that students may appropriate as an explicit, transferable frame of reference.

Social Presence, Critical Thinking, and Argument Development

I have developed the following conceptualization of online freshman composition students' development of high-quality written argument based on the literature on critical thinking and on argument development (Figure 2).

Subprocesses of Argument Development	
Subprocess1	Pinpoint the problem
Subprocess 2	Sift through the data to extract possible data relevant to the problem
Subprocess 3	Introduce a hypothesis to represent working understanding of data relevant to the definition of the problem
Subprocess 4	Explore other possibilities, searching for both confirmation and disconfirmation of hypothesis
Subprocess 5	Compile evidence for consideration of most developed and defensible possibilities
Subprocess 6	Establish a conclusion
Subprocess 7	Extract evidence from data collection to uphold conclusion
Subprocess 8	Explain how and why the evidence reinforces the conclusion

Figure 2. Subprocesses which may be used in a model of argument development (Dewey, 1938; Hillocks, 2002; Garrison, Anderson, & Archer, 2000; Toulmin, 1958).

Because this study focuses on the setting of the college freshman composition course, the subprocesses of this version of written argument are not discipline-specific. Similar models are used in many face-to-face composition courses (Kirszner & Mandell, 2004; Reid, 2006; Vandermay, Meyer, Van Rys, Kemper, & Sebranek, 2004). Although

the online composition literature does not emphasize these subprocesses of argument development, the eight subprocesses may be useful in writing high-quality arguments in online courses. Several of the subprocesses are similar to Garrison and his colleagues' description of elements of cognitive presence. Analyzing the two for similarities, one might associate subprocess one, pinpoint the problem, with the first aspect of cognitive presence, *recognize the problem*. Subprocess two, sift through the data to extract possible data relevant to the problem, could correspond to *explore the question.* One might relate subprocess three, introduce a hypothesis, to represent a working understanding of data relevant to the definition of the problem, to *gain a better understanding*. A final similarity might be found between subprocess six, establish a conclusion, and *develop new perspectives through communication with others recognized as being present in the community* (Garrison et al., 2001). The distinguishing difference between my conceptualization of subprocesses of developing high-quality written argument, grounded in the literature on face-to-face freshman composition pedagogy, and Garrison and his co-authors' definition of cognitive presence is the emphasis in Garrison and his colleagues' conceptualization of cognitive presence on communication and sharing with others. It is possible that participants in an online composition course will develop high-quality written arguments as a community of practice supported by its members' actions to establish and maintain strong social presence.

To design a method by which argument development could be taught and explained to online composition students, one might divide the subprocess of development of high-quality written argument into three categories (Figure 3). The first category is necessary *decision points*. The subprocesses in the decision points category

are the results of the critical and integrative thinking that develops an argument. Decision points that students may make while developing their arguments are pinpointing the problem, introducing a hypothesis, and establishing a conclusion. High-quality argument depends, however, on these decision points reflecting rigorous exploration of these key decisions, including collecting, disconforming, and conforming evidence.

The second category of argument development is *explorations of decisions*. These subprocesses encourage students to explore possible reasons for the problem that has been determined, and explorations of decisions also suggest that students should explore multiple possible decision points. The third category is *collections for support***.** It is in this category that the value of data collection and research is reinforced. Students are encouraged to compile data relevant to both decision points and to employ these data to identify possible better decision points to explore. Students are reminded of the importance of extracting, or collecting, relevant data that enable them to refine as well as reinforce their final conclusions.

Decision points	Explorations of decisions	Collections for support
Pinpoint the problem		Compile evidence for consideration of most developed and defensible possibilities
	Sift through possible data to extract possible data relevant to the problem	
Introduce hypothesis to represent working understanding of data relevant to the definition of the problem		Extract evidence from data collection to uphold conclusion
	Explore other possibilities, searching for both confirmation and disconfirmation of hypothesis	
Establish a conclusion		Explain how and why the evidence reinforces the conclusion

Figure 3. Three categories of subprocesses of developing an argument.

Noddings (1995) has pointed out that for centuries philosophers and educators have emphasized the importance of critical thinking. While discussing critical thinking, Noddings refers to Dewey's (1933) model for problem solving. Just as with the subprocesses of argument previously discussed, not all of Dewey's stages of thinking involve critical thinking, but the stages do lead toward solving a problem in a way that requires critical (and integrative) thinking. In *How We Think*, Dewey (1933) suggested six stages of thinking. He argued that students do not have to follow the stages in a sequential order. Dewey noted that one must form a hypothesis to test it, but one may move backward and forward among the phrases of problem-definition and problem-solution that Dewey defined. As with Dewey's model of problem solving, students may not complete the eight subprocesses of argument development that I have derived from the literature in the sequential order in which they are represented here. They may

execute a sequence of the subprocesses for argument development which accommodates their own thinking. This order may include or exclude several of the subprocesses listed. However, instructors should promote the use of all of the subprocesses in order to help students create scaffolding for developing their arguments (Figure 4).

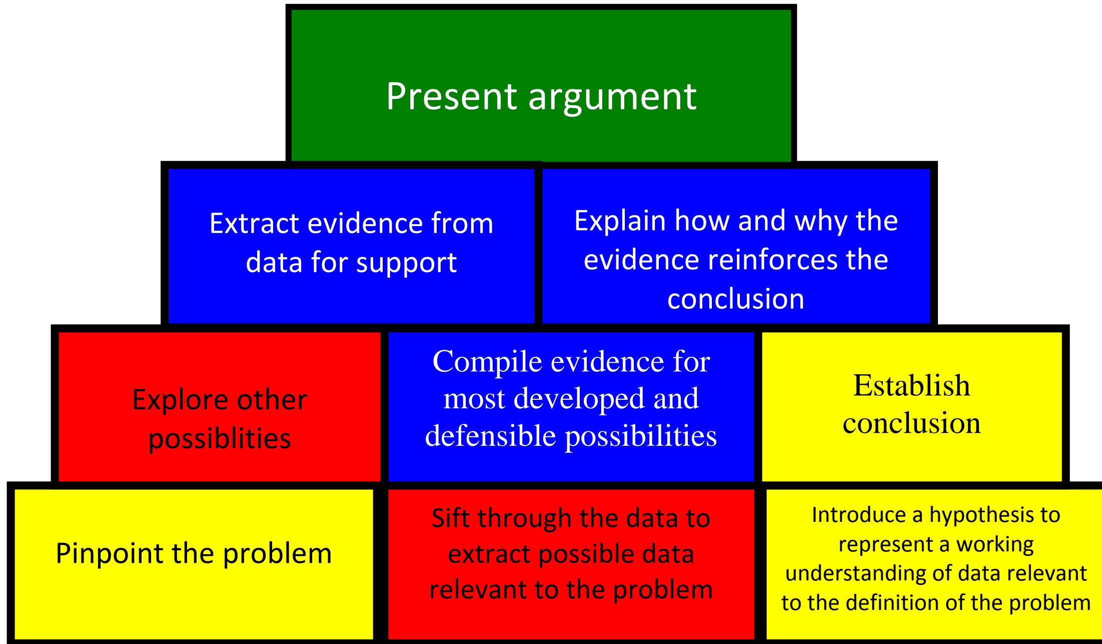


Figure 4. Eight subprocesses of developing an argument. Students should compose an argument. The yellow boxes are the decision points, red boxes explorations of decisions, and the blue boxes collections for support. Through successful usage of these subprocesses, students should be able to compose and present an argument (green box).

Critical Thinking and Freshman Composition

The Council of Writing Program Administrators (WPA) emphasized critical thinking, reading, and writing as both a beneficial process and a desirable outcome for college students in the Outcomes Statement for First-Year Composition (Council of Writing Program Administrators [WPA] Outcomes Statement, 2000). The WPA is a

national association which includes both college and university faculty who have an interest in writing programs. Many university freshman composition directors refer to the WPA's outcome statements as they develop and maintain their programs. The WPA stressed the importance of critical thinking during reading and writing.

Critical thinking, reading, and writing correspond to one of four categories the WPA emphasized in its outcome statement. For the purposes of this research, this category will be the focus in the literature review. The outcomes stated that students completing their first year of composition should be able to use both reading and writing for discovery, contemplation, and communication with others. The WPA did not specify outcomes described as *critical thinking*; however, the outcomes listed in this category are characteristics discussed in the critical thinking literature (Council of Writing Program Administrators [WPA] Outcomes Statement, 2000). The outcomes recommended that first-year composition students should be proficient in "finding, evaluating, analyzing, and synthesizing appropriate primary and secondary sources," and students should be able to use the attained information in their writing assignments as an addition to their own ideas (Council of Writing Program Administrators [WPA] Outcomes Statement, 2000). Although the WPA outcomes did not clearly state a definition for *critical thinking*, the concept described by the WPA is congruent with the characterization represented and defined in the literature.

In its most recent stated recommendations, the WPA charged instructors to prepare students to meet the desired outcomes and other recommendations by the end of their first year of composition instruction. The WPA suggested that instructors should provide explanation to students as to how the use of writing is an integral element of

thinking critically. The association also advised instructors to develop ways to teach "critical thinking, reading, and writing" as interrelated activities, control of which can be expected to instill in students the ability to employ "learning, knowledge, and power" to advance their own desired educational fields (Council of Writing Program Administrators [WPA] Outcomes Statement, 2000).

The WPA posted a statement of outcomes for electronic environments in first-year composition courses. The association still does not, however, directly address recommended outcomes appropriate for first-year composition students who are taking the course online. In July 2007, after much debate, the WPA generated this outcome statement for writing in electronic environments. These versions of the outcomes recognized new aspects of critical thinking incorporating technology, but they failed to directly address the design of online composition students' instruction equivalent to the WPA's standards for face-to-face freshman composition instruction. The electronic environment outcomes consisted of using electronic environments to create and complete written products and recognizing and making use of various rhetorical strategies to which students now have electronic access (Council of Writing Program Administrators [WPA] Outcomes Statement, 2000).

The WPA Assessment Position Statement also recognized this new century of electronics, providing methods of assessment of new electronically mediated communication practices, but it failed to acknowledge that many composition students are moving into an online educational environment which needs to be assessed as well (Council of Writing Program Administrators [WPA] Outcomes Statement, 2000). Again, these proposed outcomes recognized a new definition of critical thinking in discussing

online “communicators’ productions of multiple kinds of texts, including consideration of what texts are appropriate for what audiences (Council of Writing Program Administrators [WPA] Outcomes Statement, 2000). The outcomes recommended that assessments review students’ abilities to analyze their own understanding of assignments and their uses of both cognitive and cultural analysis in projects (Council of Writing Program Administrators [WPA] Outcomes Statement, 2000). However, the association of faculty from writing departments in U.S. universities and colleges has yet to acknowledge the need for standards for design of online education in the field of composition.

Theoretical Framework

Dewey’s Foundational Constructivism

Dewey’s theoretical framework of constructivism is a widely known and widely cited concept in present-day education. Over 70 years after the publication of *How We Think* (1933), a volume which considers the relationship between education and thinking, educators are still finding Dewey’s constructivist concepts generative in educational settings, both in face-to-face (Booth, 1998; Crick, 2003; Kaufman, 2004) and online educational environments (Huang, 2002). As education is transforming from a face-to-face environment to a more geographically dispersed, electronically mediated approach, Dewey’s foundational concepts remain prominent (Huang, 2002; Jonassen, Davidson, Collins, Campbell & Haag, 1995; Odin, 2002). In the field of composition, researchers are finding constructivism pertinent to conceptualizing students’ learning and development of knowledge, and thereby, to aiding student writers’ educational pursuits (Newell, 2006). In the book that revisited their thoughts on cultivating online

communities, Palloff and Pratt (2007) recommended constructivism as one theoretical framework that may be effectively used in an online environment. The theoretical framework chosen for this study is based on the concept of constructivism. In the field of online composition, *constructivism* can be described as a framework that emphasizes the students' use of integrative and critical thinking to develop a high-quality argument, recognizes students' life experiences and previous learning as crucial parts of the education process, and promotes students' responsibility for their own meaning making and learning and the direction in which that learning will move.

John Dewey argued that learning is a social process. He recognized the importance of joining students at the point of their growth and development of experiences in their educational pursuits (Dewey, 1938; Eisner, 2002; Noddings, 1995). In her book tracing the philosophical development of education, Noddings (1995) stressed the importance that Dewey placed on education as *growth*. In his book *Experience and Education,* Dewey (1938) expressed a concern for the educational system at that time which expected children to be receivers of information from a teacher and did not challenge them to think on their own. Dewey suggested for growth to occur, children had to be able to adjust their thinking to pursue their own inquiries. Dewey described growth as the increase of intelligence. He provided further insight by proposing that growth enabled a child to gain meaning from experience and to use this meaning to pursue more meaning in order to reach a new level of understanding (Eisner, 2002).

Dewey (1938) described these pursuits which attribute to a child's growth and affect it in a significant way as an educative experience. Educative experiences were essential to a child's growth. Growth was not only one educative experience; it

incorporates the capacity for further educative experiences, building off of the previous educative experiences. In many of his writings, Dewey described experiences as educational opportunities during which students progressed in their learning through interaction between the participant and the content (Dewey, 1938). In his pedagogic creed, Dewey (1897) stated that schooling and growth are not necessarily directly associated. Dewey described education as a consistent rebuilding of experiences (Dewey, 1897). However, Dewey suggested that some experiences prohibit or deter growth; these are known as miseducative experiences. Miseducative experiences, Dewey suggested, are those experiences in which students fail to find the connections between their previous and contemporary experiences that engender growth, thereby rendering that learning experience terminated and capacity diminished for future growth (Dewey, 1938).

Dewey characterized an *educative experience* as one in which prior experience is recalled in order to build new learning experiences, and Dewey charged teachers with the responsibility to build new learning experiences based on their understanding of student's prior experience (Noddings 1995). In much of his work, Dewey related his thoughts to children. Dewey challenged teachers to develop an understanding of children's previous experiences, including home backgrounds, and use those recollections to help children construct new, meaningful experiences that engender authentic academic understanding (Dewey, 1897, 1933).

In a qualitative study, Kasworm (2003) examined the concept of meaning making for the adult learner, in higher education classrooms. Through her interview of 90 adult undergraduate students, students no younger than 30 years of age, the researcher recognized that there were three key influences on these adult learners' meaning making

in undergraduate courses. Of these three influences, one stands out as relating to Dewey's (1897) charge to teachers. The adult students reported that their meaning making was expanded by instructors' combining of the students' prior knowledge with the content of the course (Kasworm, 2003). Students also suggested that they most appreciated instructors' efforts to incorporate their own adult life experiences into the content of the course (Kasworm, 2003). These findings suggested that, in an adult as well as childhood instructional setting, it is important that the instructor create an environment conducive to constructing new knowledge.

When Dewey (1933) characterized what the teacher's role should be in fostering educative experiences, he suggested that the teacher is responsible for constructing an environment that promotes growth by means of experiences through which learning can occur. He characterized the teacher as one who connects education and experience together by using his or her subject-matter knowledge to initiate and impact students' present experiences (Dewey, 1938). Dewey did, however, mention that the teacher does not have sole responsibility in this process. He maintained that, once the teacher provides the learning opportunity, it is the student who must take the initiative to learn. Dewey suggested that, at times, the teacher should act as a facilitator, offering students opportunities to learn. However, he emphasized that it is the students who should construct their own desired outcomes and determine what learning the teacher will facilitate. These recommendations are echoed in the distance learning literature.

Dewey (1938) proposed that interaction with materials and others in the classroom is important for students' successful acquisition of educative experiences. Noddings (1995) highlighted Dewey's assertions that students should be able to maintain

an active role in their learning and that they should be included in the construction of desired outcomes and objectives of the class' learning. In his book *How We Think* (1933) Dewey charged the teacher with following up with the students to determine if learning occurred.

Dewey further emphasized his thoughts on students' interactions with materials and others when he presented the need in education to establish the school as a type of *community* for the students (Dewey, 1897, 1916, 1938). Dewey recognized that the school was often considered a place of dispensing knowledge and encouraging students to form good habits. Dewey (1897) contended that providing students with a moral education required students having social opportunities to interact with others in a communal approach to education. In this school community, Dewey (1938) stated, the teacher should not to impress ideas and behaviors upon students. The teacher should create and cultivate opportunities whereby students successfully interact with others and have educative experiences in this established school community (Dewey, 1897).

Noddings (1995) proposed that in addition to his insights on education, Dewey may be best remembered for his work in the areas of knowledge construction and problem solving or critical thinking. In his philosophical works, Dewey found that people, at all stages of life, often use past experiences to guide their present inquiries. Dewey put forth that problem solving involves experiencing the developing of a hypothesis and the testing of it as well. In *How We Think*, Dewey (1933) established a model for problem solving, later termed critical thinking, which Noddings (1995) has acknowledged as still being prominent in education.

The first of the five, nonsequential phases in Dewey's (1933) model of problem solving, or reflection, was to identify the potential problem. The second phase was to analyze the problem, and the third phase was to establish a hypothesis. The fourth phase required students to use reasoning as they provided reasons and possibilities for the problem, and the final, the fifth, phase called the students to action, suggesting that they test the hypothesis to develop a conclusion.

Dewey's problem solving model	The subprocesses of an argument model
Identify the problem	Pinpoint the problem
Analyze the problem	Sift through the data to extract possible data relevant to the problem
Establish a hypothesis	Introduce a hypothesis to represent a working understanding of data relevant to the definition of the problem
Provide reasons and possibilities for the problem	Explore other possiblities
Test hypothesis to establish a conclusion	Compile evidence for most apparent possibilities
	Establish conclusion
	Extract evidence from data for support
	Explain how and why the evidence reinforces the conclusion
	Present argument

Figure 5. A comparison of Dewey's problem solving model and subprocesses of argument. Using the colors from the visual representation of argument development, one may see the correlations between Dewey's subprocesses of problem solving model and the

researcher's model of subprocesses of developing an argument. The yellow boxes are decision points, red boxes explorations of decisions, and blue boxes collections of information to be used as support. The green boxes are the writer's use of the argument. There are two boxes in the Dewey model that are red and blue because both collecting support and exploring decisions may occur in these phases.

There are several direct parallels between Dewey's model of problem solving and the conceptualization of developing a high-quality written argument that I have developed. Revisiting the visual representation of my model of eight subprocesses of argument development (Figure 4), one may use that color scheme for visualizing parallels between Dewey's model of problem-solving and the conceptualization of development of high-quality written argument that I have developed to frame this study (Figure 5).

As I studied Dewey's model, I considered that most of my students have not been in school for ten to twenty years. It has been my experience that when some adult students first encounter something challenging or different, they panic. One challenge that I have seen students face in writing arguments, because of the time passed or minimal instruction in their prior educational pursuits, is grappling with data, evidence, and support for arguments. Huang (2002) challenged instructors to make sure that they maintained an environment that provided "support, directions, and guidelines." I felt it would be beneficial to focus on Dewey's phrases in order to conceptualize what subprocesses of an argument course instructors may need to support by means of direction and guidelines.

The first subprocess in my model is closely related to the phase in Dewey's model. I incorporated *sift through the data to extract possible data relevant to the problem* in order for students to have a better understanding of HOW to analyze the problem. To facilitate a better understanding of the hypothesis, which is paired with

Dewey's model, I included a brief definition its function in argument development, … *to represent a working understanding of data relevant to the definition of the problem. Explore other possibilities* is another subprocess I integrated into my model so that students will better understand that they are not limited to one thought; they are welcome to expand their thoughts for multiple possibilities.

In Dewey's model the fourth phase states that one should *provide reasons and possibilities for the problem.* Based on prior experiences with students, I decided to use this same thought process but was a little more specific for an adult student returning to school. My subprocess, related to the aforementioned phase from Dewey's model, explained that students should compile *evidence for the most apparent possibilities.* The four final subprocesses of my model explicate the final phase of Dewey's model. Whereas Dewey suggests that one should *test hypothesis to establish a conclusion*, my model provides further explanation on the final subprocesses in written argumentation. I will elaborate on other influences that Dewey's work had on my course design in the section that identifies constructivism in this study at the end of my theoretical framework.

Constructivism in Writing and Teacher Education

Current research on both writing and teacher education documents the ongoing prominence of constructivism as a theoretical orientation in these respective fields. Newell (2006), reviewing theories of school writing in association with students' writing performance, and Oakes and Lipton (2006), in the field of teacher education, described constructivism as the concept of combining knowledge and learning. Newell (2006) suggested that constructivist concepts may offer educators new ideas and approaches for developing models of teaching and learning writing. Similar to Dewey's concepts of

knowledge construction, Newell (2006) described current constructivist concepts as being *active learning*, whether individual or in a group, in which students' *knowledge construction* occurs through *engagement* with material within an academic context rather than students' learning being subjugated to, and thus separated from the academic discipline being two separate entities.

In 1897 when Dewey published his pedagogic creed, he stressed that language was the social method by which people could exchange thoughts and construct ideas, not just demonstrate or recall knowledge that has been attained (Dewey, 1897). More than 100 years after Dewey published his pedagogic creed, Newell (2006) emphasized the need for the field of composition to acknowledge that rather than writing being an activity completed in a social setting, the field should recognize writing as a *social event*. Newell suggested that recognizing writing as a *social event* requires instructors to modify their roles as the instructor to one of a facilitator thereby encouraging students to construct new knowledge rather then just recall information attained.

Basing much of their approach to public school teaching as social justice on Dewey's constructivism, Oakes and Lipton (2006) provided a characterization of constructivism that allows the elaboration of guidelines for constructivist teachers. One guideline is that teachers cannot settle for short, concise answers. They must encourage students to construct an answer, reasoning and making sense out of their experiences as they seek the answer (Dewey, 1900). Another guideline of constructivist instruction is that teachers must lead students to the understanding that in life there are often many correct answers, and reasonable people will likely arrive at different answers (Dewey, 1943). A third guideline of constructivist instruction is that teachers must promote the

idea that, even though memorizing is important, experimenting to find a solution is also a method of learning (Dewey, 1943). Both Oakes and Lipton (2006) and Newell (2006) suggesedt that the constructivist approach challenges students to think and grow beyond what they are often accustomed to as schoolwork.

Constructivism in Reading

In this technological world in which we live today, it is especially challenging for teachers to find ways they can help their students to have more than just an efferent reading stance with a text. Although there are times that an efferent reading stance is appropriate, most teachers also want to guide their students toward a more aesthetic reading stance, a more intrinsic experience in which the student *constructs* a world in the story and becomes a part of the story (Rosenblatt, 2005; Wilhelm, 1997). Intrinsic motivation appears to be an integral part of an aesthetic reading experience (Guthrie & Anderson, 1999).

Guthrie and Anderson (1999) emphasized motivation as a significant construct for reader engagement. In their argument that students' motivation stems from conditions such as (involvement, an interest in the topic, a desire to understand, and, sometimes, for a grade), Guthrie and Anderson referred to Dewey's principle that educative experience depends on movement toward recognition of something to be learned in one's pathway and moving toward that entity in order to experience growth. Engaged learning depends on an agent recognizing something that needs to be learned in his or her own path and moving toward that as part of who they are.

As the authors discussed motivation in terms of reading, the intrinsic and extrinsic reasons that students read, they proposed that as motivation increases, the engagement

increases. Guthrie and Anderson (1999) operationalized engagement as entailing three distinct concepts. The authors stated that reader engagement includes the use of prior knowledge, reading strategies (i.e. comprehending, predicting, and summarizing), and social interaction. Like Dewey, Guthrie and Anderson recognized the significance of students' social interaction in their learning and growth.

Experts in the field of reading engagement sometimes use multiple terms to describe closely related constructs. Although the terminology may be different, the concepts are quite similar. Engaged student readers use previous personal experiences and knowledge, reading strategies (i.e. moves expert readers make), understandings and perceptions developed during the reading, and newly attained knowledge to construct a different level of understanding, one in which the reader make moves to engage in or become a part of the story or become a part of the world of the text (Guthrie & Anderson, 1999; Langer, 1995; Rosenblatt, 2005; Wilhelm, 1997) (Figure 6).

Reader Engagement Author	Author's description of the experience	Characteristics of the reading experience	Reader's constructed experience
Guthrie and Anderson	engagement	Readers build on conceptual knowledge by using various strategies (i.e. word recognition, summarization, and predictions) and social interaction to fulfill motivational goals and to understand and participate in the newly developed world	Social world
Langer	envisionment	Readers relate to their understandings, feelings, and questions that arise while reading	Text world
Rosenblatt	lived through	Readers recognize intrinsic expressions such as developing emotions, encountering frustrations, and creating mental pictures	Evocation
Wilhelm	engagement	Readers have personal experiences and evocations within the story world	Story world

Figure 6. Authors' explanations of readers' engagement (Guthrie & Anderson, 1999; Langer, 1995; Rosenblatt, 2005; Wilhelm, 1997)

Each of the experts on reader engagement listed in Figure 6 introduced an experience a reader may have with a text. When reviewing the chart, one will note that each expert's description of the characteristics of the reading experience revealed that the reader is demonstrating an action, making moves as he or she reads. It is by making these moves that readers may construct new experiences.

Constructivism in Distance Education

Many distance education practitioners and theorists advocated the use of the constructivist approach in online learning environments (Huang, 2002; Jonassen et al., 1995; Odin, 2002; Palloff & Pratt, 2007). Like Newell and Oakes and Lipton, those associated with distance education agreed that knowledge cannot exist apart from learning (Newell, 2006; Oakes & Lipton, 2006; Vrasidas, 2000). As distance education has expanded, researchers in the field have found that the use of constructivist technology has provided more learning opportunities by enabling teachers to develop student-centered courses using communication tools such as e-mail, chat rooms, and discussion boards. These course features have aided in the creation of collaborative environments in which students may exchange thoughts, share life experiences, and consider alternatives based on others' input (Huang, 2002; Jonassen, Davidson, Campbell & Haag, 1995; Palloff & Pratt, 2007; Vrasidas, 2000). Through course design and the use of technology, distance education instructors, especially those who teach entirely online, can create opportunities for students to recall prior experiences as they construct new meanings in response to present situations related to the subject matter of the course. Instructors can focus students both on the outcomes of the previous experiences and the processes and

skills that were developed to learn (Dalgarno, 2001; Jonassen et al., 1995; Vrasidas, 2000).

In their first edition of *Building Online Learning Communities*, Palloff and Pratt (1999) did not address constructivism in an online environment. However, in their second edition of the book almost 12 years later, the authors argued for the use of a constructivist approach in the online environment. Palloff and Pratt (2007) advocated incorporation of past experiences to help students learn; they suggested that students can apply their own life experiences, discipline-related and personal, and the knowledge they have already attained should lead to a deeper learning experience. Garrison and his colleagues (2000) argued that, although there are often pre-established objectives for classes, students do not have to lose the opportunity to have input in student learning. Palloff and Pratt (2007) advised that the objectives should be reached through constructivist ways, meeting the course objectives while trying to maintain a learner-centered environment. Students assuming responsibility for their own learning and for the learning of other students in the class reflects that in a constructivist learning environment, teaching and learning are reciprocal rather than linear or sequential with only the teacher dispensing knowledge (Jonassen et al., 1995; Newell, 2006).

Vrasidas (2000) created a bridge from constructivist practice in a physical classroom to that of a virtual classroom in distance education by recalling the importance Dewey placed on interaction when he defined learning in a face-to-face classroom. Vrasidas then referred to foundational contributors to the field of distance education—such as Moore, McIsaac, Gunawardena, and Wagner—who emphasized interaction as a major construct in the distance education environment. Interaction and collaboration with

others while learning allows for more learning to take places as students communicate experiences, ideas, and opinions (Odin, 2000; Vrasidas, 2000). Online discussions, both synchronous and asynchronous, allow for students to collaborate, compare their own ideas with others, share learning, and determine how they learned. Discussion boards are one potentially constructivist environment where instructors may suggest that students consider what they have learned as well as other possibilities (Huang, 2000; Jonassen, 2000). Evaluation may be productive in this kind of an interactive environment because participants may receive feedback from the instructor and other participants in the course (Vrasidas, 2000). In a constructivist environment, participants should interact with the knowledge provided, the learning environment, and other participants in that environment. The instructor's role is that of a facilitator, guiding the student as he or she interacts in these areas and students interact in ways that generate new learning experiences (Herring, 2004; Palloff & Pratt, 2007).

In a distance education environment that qualifies as constructivist, technology promotes the exchange of various perspectives and suggests that there is not just one answer or path to take for problem solving (Vrasidas, 2000). Technologies such as discussion boards, chatrooms, and virtual classrooms permit the active learning online that practitioners Palloff and Pratt (2007) have defined as an process in which all participants, the students and the instructor, should take part. Palloff and Pratt suggested that instructors should pose open-ended questions, encourage communication among participants, and provide high-quality (constructive) feedback to the students in their online courses to promote deeper thinking and critical thinking. Palloff and Pratt (2007) asserted that it is not the amount of material that students may recall for a test that is an

important outcome for a course, but it is the evidence of critical thinking and knowledge developed that should be the focus for learning outcomes.

Constructivism and This Study

Dewey (1938) was concerned that many students [children] were having what he would call miseducative experiences because their classes were centered on the teacher, and the students were just given information. The same may easily happen in an online course. It is easy for an instructor to provide lectures and reading materials and then just give the students the equivalent of pencil and paper tests. Online instruction may need to move toward a constructivist, more learner-centered environment in which students may share ideas and construct new meaning out of what they learn (Palloff & Pratt, 2007). This study is designed based on the most constructivist framework that could be accomplished in the institutional setting where the study was carried out. Because of institutional constraints, such as the number of essays and the brevity of the course, I did not feel as if I could design a purely constructivist course. I did, however, make attempts to develop questions and assignments that would encourage the participating instructors to consider and move toward a more constructivist environment.

Just as Dewey suggested about students [children], in order to foster student growth in an online classroom, it is important for the teacher to recognize a student's past experiences—discipline-specific and personal, if possible—in order for a student to gain confidence in the technology, the content, and the actual learning process as he or she constructs knowledge (Palloff & Pratt, 2007). To draw participating students' personal experiences into the course environment, I asked the students to post several things they would like their peers to know on the discussion board.

Dewey promoted that classes be designed so that students could be responsible for their own learning. The design of online courses often makes it necessary for the student to accept responsibility for his or her learning. Students taking online courses need to be self-motivated and self-disciplined in order for learning to be effective in an online course. Huang (2002) recognized that many adult learners are self-motivated and self-directed. Although an instructor may provide the online learning environment of a community of practice, content-area expertise, and social presence and the participants may work and learn collaboratively, it is ultimately the student's responsibility to participate in the online course as a community of practice (Palloff & Pratt, 2007).

Referring to a previous discussion about characteristics of a community of practice, one may recall that Wenger emphasized that domain, common goals and common ways for achieving those goals, among participants in the environment and practices (opportunities when students share resources such as life stories, knowledge tools, and previous practical experiences) in the domain are significant characteristics of a community of practice. Wenger (n.d.) explained that participants of a community of practice should interact and participate in activities and discussions that may help others, provide information, and offer learning to the participants.

Also included in the earlier discussion of communities of practice was a more recent description of an online community of practice. Palloff and Pratt (2007) stressed the significance of participant exchange (i.e. sharing thoughts, personal information, and related life experiences) in both creating a sense of connectedness and constructing new knowledge that is domain specific. The practitioners recognized that it is within this supportive environment, one establishing trust and providing information, that students

often turn to each other for feedback and advice rather than solely addressing the instructor (Palloff & Pratt, 2007).

One support of the community of practice the instructor can provide is posting open-ended or higher-order thinking discussion board questions and facilitating students' ensuing discussion to develop critical thinking. Instructors can model, scaffold, or reinforce the kinds of responses that their students should provide, guiding the students toward learning opportunities within the discussions, and acknowledging learning that occurs in the domain of the community of practice (Huang, 2002; Palloff & Pratt, 2007).

Three of the elements of a community of practice— life stories, knowledge tools, and previous practical experiences— may also be incorporated into a constructivist course. Students sharing life stories with others, tools that they have used for learning, and previous practical experiences that apply in the given situation creates an environment in which the students learn from each other. Instructors may encourage students to participate, sharing these three elements in the discussion board postings. Because of constraints such as time zones and adult-students' work schedules, instructors may not be able to hold synchronous class discussions. The discussion board serves as an asynchronous means by which to have class discussions. The instructor serves as a facilitator on the discussion board, providing constructive feedback and direction so that other students might participate in a particular discussion as well.

Considering the nature of the discussion board and the fast pace of the course, I provided the participating instructors in my study with discussion board assignments. These discussion board postings, although not purely constructivist, did have constructivist aspects. Because the instructor cannot interact with the student while he or

she is answering the questions, I incorporated other questions that introduced a more directive approach in the study to help the student consider new aspects of the meaning that they have made while contemplating the more open-ended question. One of the discussion board questions is provided below. The question in bold is the constructive question.

> ***Discuss how the author's craft in one of the stories you read affected your understanding of the story.*** *What literary devices did the author use to craft the story? How did these devices influence your ability to construct meaning? Use evidence from the text to support your thoughts.*

The discussion board questions were posted, and the students were directed to respond to their "group mates" assigned by the instructor. The instructors were required to visit the discussion board postings and provide constructive feedback to encourage the student (or group) to think more critically and move more toward developing an argument. Although the instructors did not use all five elements of the feedback as I had hoped, those who responded to the students did sometimes use their own interpretation of at least one element. An example is provided below.

> *I think you make a good point, Student 45, about her public and private responses. Do you think she went upstairs to contemplate freedom? What was her motive? Instructor 2*

This question may be somewhat directive, but it does also compliment the meaning the student has previously made, and it encourages Student 45 to construct new meaning based on that which she already has developed. Student 45 is a female, and as she posted responses to the short story "The Story of an Hour," a story based on a female

character, my hope would be that she may be able to use her prior life experiences to connect with the story and construct new meaning. That is why one of my elements of feedback across all four of the discussions was to ask the student if she was able to connect with any of the characters in the story. This provides students an opportunity to bring previous educative experiences, life experiences, and experiences as readers of literature into the story to construct new thoughts and ideas. When the instructor acts as a facilitator and a guide for the discussion board postings, each posting should encourage new considerations and learning (growth) in the domain of reader response to assigned literature.

Discussion board exchanges are one way in which students may have educative experiences in an online course. As Dewey argued, social interaction is important for educative experiences to occur. Jonassen (2000) noted that discussion is beneficial in a learning community where participants exchange information in search of meaning and reflect on knowledge they have constructed.

In addition to discussion boards guiding the students to make new meaning about the text, the reading heuristics provided to the participating instructors were an avenue for students to take to make new meaning of their experiences in the worlds of assigned texts. In developing the reading heuristics for the study, I considered the fact that if I were teaching a face-to-face college class, it is quite possible that I would initiate discussion about many of the questions that I used in the heuristic. Recognizing that this assignment had to be completed in an online class, I did not create an assignment that was purely constructivist. Although the reading heuristics have aspects of a constructivist assignment, I also felt that there were times when the design of the scaffold for the

participating students' reading had to be directive to accommodate the course pacing and course requirements in this particular university setting. In this university setting the students were distributed around the world and in different time zones. Being restricted to asynchronous discussions limited the opportunity to ask a particular student to "tell me more." That is, other students were not necessarily present at that moment in a shared physical space. I, therefore, included directive questions as well as purely open-ended questions given this university setting. I felt the directive questions were a means by which I could encourage the students to construct new meaning without being physically or virtually near one another for facilitated conversations.

Two of the more constructivist reading heuristic questions are provided below. These two questions demonstrate constructivist learning in that they both are open-ended, providing an opportunity for the students to answer these questions in various ways. I also felt that these two questions were constructive because they both allow opportunities for students to include previous life experiences and prior knowledge in their pursuit of meaning and their provision of answers.

What were your first impressions of the story when you looked at it?

Share one way you "connected" with the story.

The course design included the discussion board postings and the reading heuristics to encourage students to use their prior experiences, educative and life, to construct new meaning and to provide opportunities for the students to recognize thoughts and ideas which might be different from their own. I designed these assignments to serve as scaffolds for the students to again to think more critically in ways driven by

the students' previous life and literary experience and to move forward developing an argument in their essays grounded in their distinctive life and literary experiences.

CHAPTER III. PROCEDURES AND MEASURES

This chapter describes the two treatments compared in this study, beginning with a description of the two treatments and then a presentation of the research questions and my hypothesis. I describe the setting and sample for the study and the features distinguishing and common to the two treatments. The chapter concludes with information on interrater agreement for my research assistants, a discussion of how I operationalized the independent and dependent variables used in the statistical tests of my five hypotheses, and a description of the instructor training.

Two Contrasting Treatments

Rather than an experimental and a control group, this study employed two different treatments. Both treatment designs were based on as constructivist an approach as the constraints in the research setting would permit. The cognitive treatment addressed only critical thinking and argument development. The situational treatment integrated social presence cues with supporting students' critical thinking and argument development. This study was implemented in three segments: pretraining, training, and posttraining. The two treatments represented variation in the independent variable that was the grouping variable of two types of treatment. There was a different independent variable based on each hypothesis. Each of these independent variables related to social

presence cues. Using two treatments allowed me to answer the study's two fundamental questions: What is the effect of instructor training on instructors' use of social presence cues while teaching critical thinking and written argument? What is the effect of instructor training on students' critical thinking skills and building of high quality arguments in the setting of an online freshman composition course?

All of the instructors participating in the study were selected from a population of 13 instructors scheduled to teach for the designated university that term. Four instructors consented to participate in the study. Each participating instructor agreed to implement the course I designed in her online ten-week ENG 1102 courses. The instructors also agreed to participate in a two-week online training session during the term. The instructors were randomly assigned to one of the two treatments. The participating instructors were not made aware by me of any similarities or differences between the two treatments. I described the study as a comparison of two treatments to increase students' critical thinking and high-quality argument development in online freshmen compositions courses.

Personal observations of the online classes and comments shared by the instructors led to me believe that the instructors' assignments, activities, and course implementation were consistent with that which I designed. As Chapter 4 explains in detail, however, I did observe a difference in the extent of instructor participation in the training. The situational instructors were actively involved, interacting with each other and participating in the daily assignments. There was no interaction between the cognitive instructors, and only one instructor completed the daily assignments. My

analysis of the difference between the two treatments is presented at the beginning of Chapter 4.

The four participating instructors completed a two-week training session that I designed for them. The training was designed in a Blackboard shell. The instructors only saw the treatment to which they were assigned. Instructors 1 and 3 were in the cognitive treatment training, and instructors 2 and 4 were in the situational treatment training (Table 1). The duration of the training was two weeks. The instructors were presented with the first week only, and then the second week was available during that time.

Table 1

Participating Instructors' Demographics

Instructor	Treatment	Gender	Total years of college teaching experience	Years of online teaching	Highest Degree	eArmy or eCampus section[5]
#1	Cognitive	Female	8 years	4 years	MA	eCampus
#3	Cognitive	Female	30 years	7 years	ABD (EdD)	eArmy
#2	Situational	Female	5 years	5 years	MA	eCampus
#4	Situational	Female	11 years	10 years	MA	eArmy

The training sessions were presented through Wimba collaborative learning software. Wimba provides instructors with many valuable options for presenting in an online classroom. These options can be something as simple as incorporating a voice-over into a PowerPoint presentation, archiving a lecture in which the students can see and

hear the instructor, or holding conferences in which the two participants can both see and hear each other. For the training section, I integrated my talking with PowerPoint presentations. I also provided an electronic copy of each session in case someone had technical difficulties or wanted to save it for future use.

The instructors in both treatments participated in seven sessions during the training (Appendices C-I, K). Each session delivered information, grounded in the literature, on specific topics pertinent to critical thinking and written argumentation. In addition to this information, the training for the situational treatment instructors included the initial session on social presence and social present cues. Throughout the training, the instructors were asked to interact with each other, participate on the discussion board assignments, and complete assignments similar to those they were using in their courses. After the two-week training, the instructors provided an interview about their findings and feelings about the training, and they implemented the posttraining part of my study.

To pursue high-quality implementation of both treatments, I provided the four participating instructors with all assignments and information for the online ENG 1102 course. They were asked not to alter the assignments in any way, but they were encouraged to adapt the class to fit their individual personalities in other ways (e.g changing the phrasing of non-assignment aspects of the course to blend in with their own "voice" in the online class, adding encouraging statements for the students, and adding announcements that they deem necessary for their students).

All online instructors at this university are required to pass a training section during which they are taught to implement Blackboard and a standardized proficiency test on the various elements on Blackboard. English instructors are not trained on

discipline specific material. Each of the four participating instructors has been teaching online at the designated university or elsewhere for at least five years. The instructors had all taught ENG 1102 in prior terms; therefore, each was familiar with the standardized syllabus and course requirements. The participating instructors were given writing and discussion board assignments for week 1 and 2. I did not mention critical thinking or social presence in these assignment instructions. Similar assignments were given for weeks 3 and 4. In addition to teaching these assignments, the instructors participated in their assigned training for the two treatments during weeks 3 and 4. During weeks 5 and 6, following the training, the instructors were again given both writing and discussion board assignments. The instructors in both treatments incorporated their adapted versions of the eight subprocesses of an argument, and they also used the Guide to Rating Critical Thinking and Integrative Thinking (GRCIT) to both scaffold and reinforce students' demonstration of critical thinking. In addition to their training, the participating instructors participated in an initial, end-of-training, and concluding telephone interview to share thoughts and experiences. The protocol for my interviews are included in the Appendix section of this document (Appendices A, L, and P).

Hypotheses

To test the following hypotheses, I measured the students' critical thinking scores on both the discussion board postings and essays, and I also counted the number of times that both instructors and students used social presence

Hypothesis One: Following training in the use of social presence cues, instructors will use these cues more than they did before social presence cue training.

Hypothesis Two: The incidence of instructor social presence cues will correlate with the incidence of social presence cues in students' discussion board posts.

Hypothesis Three: Students who experience the condition of their instructors' situational treatment training will achieve higher quality written argumentation than students who experience the condition of their instructors' cognitive treatment training.

Hypothesis Four: Students' use of social presence cues will predict students' achievement of development of written argument.

Hypothesis Five: Students' use of social presence cues will correlate with the incidence of individual and/or collaborative critical thinking. This hypothesis was removed and restructured for a post hoc analysis.

Setting and Sample

This research took place in an online environment that is a part of a traditional bricks-and-mortar college in southeast Alabama, so certain aspects involving participants were governed by the fact that the study was conducted within this particular institutional setting. The course was developed and run through the Blackboard operating system. The ENG 1102 (Composition II) courses and training took place in Blackboard.

The online English Composition II courses at the university have a standardized syllabus. The instructors are given the basic requirements, and then they are allowed the academic freedom to teach these requirements as they wish. The university requires that ENG 1102 students submit three literary-based essays, a research paper, and two equivalent assignments, which are not clearly defined in the course syllabus or guidelines. The course introduces students to short stories, poetry, and dramas and

requires essays on each of the three genres. The instructors teach on Blackboard and are given the opportunity to design their own classes. For this study, the participating instructors all used the Blackboard course that I designed, including assignments and other course information and activities.

Once the designated university granted permission to complete the study, invitations were sent out to the scheduled instructors via email. Thirteen instructors were scheduled to teach the online sections of ENG 1102 the term of the study. Four instructors agreed to participate. I would have preferred to have two to four more instructors; however, many instructors were hesitant to participate because they preferred not to use a course design other than their own.

Because of the amount of the work that the online ENG 1102 students have to submit in a ten-week term, only 25 students are assigned to each classroom. Of the four instructors, two were teaching eCampus (a mixture of soldiers and civilians) courses, and the other two were teaching eArmy courses (a whole class of soldiers). Just a few days prior to the beginning of the term, Instructor 2 was assigned another class of students; therefore, she had two classes rather than just one.

In my experience as an online instructor, I have found that adult students have many outside responsibilities that often make attending school or even participating online a challenge. As an eArmy instructor, I have found that in addition to the everyday challenges of many adults, eArmy students are often in dangerous situations with limited connectivity and resources. I have also realized that eArmy students often hesitate to participate in anything that might seem like additional work, and they are sometimes

uncomfortable with providing personal information, perhaps because of the nature of their occupations.

Once the four instructors agreed to participate in the study, I sent out invitations to the students in these classes. These students were considered a convenience sample due to the fact that the students had already been assigned to the instructor. All students in an online or on-site ENG 1102 class at this university must complete prerequisites which are either passing an English placement exam or completing a remedial writing course and the Composition I course with a C average. Approximately 113 students were enrolled in the four instructors' classes. Table 2 shows how many students consented to participate in the study. Fifty students agreed to participate in the study by allowing me to collect their course work. Of the 50 participating students, 17 were from classes taught by the instructors randomly assigned to the cognitive treatment, and the remaining 33 were assigned to the instructors randomly assigned to the situational treatment.

Table 2

Number of Students Participating in Study, Categorized by Instructor Number and Treatment

Instructor	*N*	Treatment
1	11	cognitive
3	6	cognitive
2	24	situational
4	9	situational
Total participants	50	

The Difference between the Treatments

The key feature that differed between the two treatments was the discussion and practice of using social presence cues. Prior to the training sessions, the pretraining segment, there was no difference between the two treatments. The situational treatment training provided one day (week 1, day 2) when the instructors learned about social presence, its significance to researchers and practitioners, and eight social presence cues that could be significant in online classes. This situational treatment training session on social presence oriented the instructors to the concept of social presence and presented the social presence cues. I was unaware whether the instructors would be familiar with the term *social presence*, so the training began with a definition of the term.

Once a definition had been established, I then explained that there are two positions on social presence. The most prevalent position on social presence is one of *perception*, the recognition that there are other real people participating in the course. A

more recent position on social presence is that it is also an *action*, the moves students make in order to create this sense of presence in the online class. After presenting information on several key empirical studies, I explained the value of social presence in the online classroom, focusing the two situational treatment instructors on Palloff's and Pratt's experiences.

To move the situational treatment instructors toward understanding the purported values of social presence cues to advance students' critical thinking experience, I offered information on Garrison, Anderson, and Archer's (2000) community of inquiry model. I explained that this model posits that higher order learning, critical thinking, occurs when cognitive presence, social presence, and teacher presence are all in place within a CMC course (Garrison et al., 2001; Rourke et al., 1999). Cognitive presence allows students to recognize questions, explore possibilities, and construct new meaning through communication with others in the course (Garrison et al., 2000). Garrison and his colleagues (2000) elaborate on the importance of social presence for critical thinking to provide opportunities for emotional expression, free exchanges of thoughts, and access to others' ideas that are important for developing an understanding. The third type of presence in the community of inquiry model is teacher presence. Garrison and his colleagues (2000) characterize this form of presence as encompassing the design of the course; developing an environment in which participants feel safe to share, agree, and disagree; and facilitating discussion forums to encourage participants' construction of understanding.

Once the situational treatment instructors had a better understanding of social presence, I provided an explanation of the eight social presence cues, categorizing them

as revealing the instructor and recognizing the participants (Rourke et al., 1999; Wise et al., 2004) (see Figure 1). I concluded this particular session by asking the instructors to consider how they might incorporate social presence cues in their online classroom, and I suggested that the instructors consider both possible positive and possible negative aspects of incorporating social presence cues into their online courses.

In order to realign the two treatments, I provided abbreviated exercises during week one of the situational treatments that the cognitive treatment instructors completed in detail. By the beginning of week two, the cognitive and situational treatments training sessions were on the same agenda. Both of the treatments consisted of the same assignments during the posttraining segment of the participating instructors' courses. The only intentional difference between the two treatments was that I reminded and encouraged the situational treatment instructors to use the social presence cues when interacting with their students (Figure 7).

Cognitive Treatment (CT)	Situational Treatment (ST)
Introduction to training	Introduction to training
Session 1—Critical thinking, reading, and argument development	**Session 1— Social presence cues**
	Session 2—Critical thinking, reading, and argument development
Session 2—Engaged readers	Session 3—Engaged readers
Session 3— Questioning	Session 4— Questioning
Session 4—Encouraging critical thinking and argument development on the discussion board	Session 5—Encouraging critical thinking and argument development on the discussion board
Session 5— Responding to discussion board postings	Session 6— Responding to discussion board postings
Session 6— Encouraging students to think critically and develop high-quality arguments in essays	Session 7— Encouraging students to think critically and develop high-quality arguments in essays
Session 7—Research procedures and essay review	

Figure 7. Training sessions for the cognitive and situational treatments. Sessions in bold identify the differences between the cognitive and situational treatments and the inclusion of the social presence cues session in the situational training.

As I designed the study, I did not account for the major time constraints of a ten-week course. In my study design, I had planned to spend time reading the situational treatment instructors' postings and coaching both of them on using more social presence cues. Because of the rapidly moving course, I was unable to spend the time I had planned coaching the situational instructors during the week 5 and week 6 discussion board postings. In addition to the time constraints, I felt as if the instructors were a bit challenged with the abundance of new material I had presented to them in the two-week training session. I decided that it would be better for them to have time to digest the material on their own rather than have me give them more information in coaching

sessions. I did, however, send the instructors an email both weeks of the posttraining, reminding and encouraging them to consider the social presence cues that were presented to them in their training. The two emails that I sent are provided below.

(Week 5)

Hi Ladies,

I see that your students have already posted to discussion board #5. As you respond remember the social presence cues we discussed in the training. Have a great day! Paige :O)

(Week 6)

Hi Ladies,

I hope you are having a great week. As you reply to the students' postings in discussion board #6, don't forget to consider social presence in your responses. Thanks! Paige :O)

Elements Common to the Treatments

All pretraining and posttraining assignments: discussion boards, reading heuristics, and essay questions, were the same for both treatments. All instructors received an information packet that outlined the elements of the six-week study such as discussion board postings, question and guidelines; essay questions, topic and guidelines; guidelines for constructive feedback, and an informational handout graphically displaying the subprocesses of an argument. I followed up with each instructor individually to

determine if there were any areas of the training that were unclear or if an instructor had questions about the study logistics.

All instructors used reading heuristics in the pretraining and posttraining assignments (Appendices B & M). I designed a set of ten questions based on the reading assignment that served as a scaffold to encourage students to think more critically. These questions began with visual observations about the text, and they moved to questions that encourage students to think more critically. The reading heuristic provided the students with three forms of scaffolding. After the students read a literary piece for the first time, they were told to read over the questions and then read the story again. Therefore, the heuristic served as a scaffold for their reading by giving them hints and suggestions that should help them engage in reading and read critically as they read for a second time.

The reading heuristic may have served as a scaffold between the text and the students' use of various reading strategies that engaged readers employ to help them make meaning of that which they are reading. The reading heuristic further served as a scaffold in that it was a turning point between the two main assignments, the discussion board and the essay. It is my experience that many adult students are not able to dedicate the time that they would like to their studies due to other obligations, so reading heuristics like this may have helped the students construct a better understanding of the selected short story or play. The reading heuristic may have encouraged students to move from sharing on the discussion board to thinking more critically as they moved toward the essay. By employing this heuristic, the students were encouraged to think critically, perhaps often without realizing that they had moved to a more analytic way of thinking.

The reading heuristic was not designed as only a scaffold for the students. As the instructors reviewed the pattern of questioning, the types of questions provided, and the questioning session in the training, they may have gained more insight about their own question development and recognized the value of using open-ended questions, higher-order thinking questions, and life-application questions. Proceeding from concrete to more abstract, these questions could promote critical thinking so that the instructors might use similar scaffolding when developing their own heuristics, discussion board questions, and essays.

All instructors used the Guide to Rating Critical and Integrative Thinking (GRCIT) (Appendix J) to promote and grade critical thinking and written argumentation. The GRCT (Guide to Rating Critical Thinking), first developed in 1996, was based on the work on conceptualizing argumentation of Toulmin (1958), as well as on other scholarly works, local practice, and expertise in the critical thinking field (Condon & Kelly-Riley, 2004; "WSU Critical Thinking Project, n.d.). Providing their own seven descriptors of critical thinking, which are similar to the subprocesses of argument development I have employed, the authors of this instrument made the GRCT available to WSU instructors. This scoring guide was developed to study the relationship between writing and critical thinking (Condon & Kelly-Riley, 2004; "WSU Critical Thinking Project," n.d.).

In 2006, educators at Washington State University updated the Guide to Rating Critical Thinking to include integrative thinking, and this scoring guide thus became known as the Guide to Rating Critical Thinking and Integrative Thinking (GRCIT) ("WSU Critical Thinking Project, n.d). This scoring guide consists of seven scales for an instructor to use to score a student's work.

In his study on teaching argumentative writing to middle school social studies students, Yeh (1998) promotes using holistic scoring instruments to analyze the use of argumentation in order for instructors to better maintain objectivity when scoring essays. Although the Guide to Rating Critical Thinking (GRCIT) is criterion based, not holistic, the seven scores provided through the guide should not be influenced by legitimate differences in teaching methods among the instructors participating in this study.

A main feature present in both treatments was instructor training on encouraging students to think more critically and to develop arguments that meet the criteria of the GRCIT. I interviewed each instructor by telephone prior during the pretraining segment. This interview was to determine what preconceived ideas about critical thinking, written argumentation, and interjection of students' and instructors' personality into class discussion these instructors were bringing into the training. I also wanted to be able to see if the instructors' attitudes or opinions changed after the training and at the end of the study.

The first session of the training differed by treatment; the situational treatment had an in-depth session on social presence. The rest of that week, the situational treatment instructors received the same information with abbreviated instruction. I dispensed the same information to participating instructors in the sessions for both treatments. As an ENG 1102 instructor, it has been my experience that critical thinking is a term that is often used but seldom explained. As a supervisor of other instructors, I have found that because many instructors' educational experiences are content specific, they may not be able to operationalize critical thinking or institute ways to encourage students to think critically when developing and presenting a written argument. With much focus

in higher education being on critical thinking, I determined it to be imperative that instructors receive training in critical thinking and argument development (Appendix D).

The training began with The Foundation for Critical Thinking's definition of critical thinking as "the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action (Scriven & Paul, n.d.)." After reviewing other definitions of critical thinking, I challenged the instructors to generate their own definitions of the term. I provided information on other key terms, critical reading, and argumentation. In conjunction with the information on argumentation, I proffered my own eight subprocesses of argumentation for instructors' review and, in one of their training assignments, I invited them to reword these subprocessess to provide clearer student understanding (Appendix D).

Subsequent training sessions included information on reader engagement, making moves to further students understanding of meaning and structure in texts that they read and questioning: creating questions that encourage students to expand their thoughts and consider multiple possibilities. Together with sources such as Wilhelm and Rosenblatt, I drew the information for the sessions from college textbooks that might be familiar to the instructors. I knew the terminology would be such that the instructor could better understand in a short amount of time and could more easily relay these findings to the students. I provided both the cognitive and situational treatment instructors with elaboration and reading heuristics, guidelines for constructive feedback on the discussion board (Appendix I), the Guide to Rating Critical Thinking and Integrative Thinking

(GRCIT) scoring guide, and samples of essays that demonstrate the three categories on the GRCIT: emerging, developing, and mastering (Appendix J). I interviewed the instructors after the training to gain insight on their responses to the training (Appendix L).

In addition to the provided posttraining assignments, all instructors received additional copies of the GRCIT and the sample essays to use in their posttraining instruction. Instructors were provided the same instruction for this segment of the study. Any additional instructions or suggestions provided to the situational treatment were conveyed to them through email.

At the end of the training, I interviewed the instructors from both treatments by telephone to gain insights on the benefits of the training and also areas that I should consider adjusting for future studies. I thought it would be interesting to ask the instructors to share two outcomes that they hoped to see in their students' posttraining assignments. After the two weeks of posttraining, the instructors completed a final telephone interview in order for me to be able to gain insights on their final thoughts about the study, their students' critical thinking, and their students' achievements in written argumentation.

Interrater Agreement

Four English instructors, not participants in the study, volunteered to be my research assistants by scoring the discussion board postings and essays and by counting the occurrences of social presence on the discussion board. Two research assistants scored the essays, and the other two research assistants scored the discussion board

postings. In order to establish interrater agreement between the two assistants scoring the essays for critical thinking skills, I provided both with a copy of the Guide to Rating Critical Thinking and Integrative Thinking (GRCIT) and discussed the seven items listed with each scorer individually. I also provided samples of essays similar to those that they would be scoring during the study. All interrater agreement was based on the percent rate (Ross & Shannon, 2008).

Once the essays had been scored, I completed a calculation of summed scores to determine interrater agreement. I added all scores the two raters had in common and divided the sum by the total points scored. After completing the calculations, I found that the interrater agreement for the research assistants scoring the essays was 94%. Unfortunately resources did not permit recalibration for interrater agreement during the scoring of the participating students' pre- and post-treatment discussion board and essays. Before the scoring of the pre- and post- treatment essays, I coded the essays to conceal from the scorers which of the two treatments each essay represented. It was not possible to completely conceal which essays were pre compared to posttraining, because one of the two scorers would have known that short stories come earlier in the course and drama comes later.

The research assistants scoring the discussion board postings for critical thinking also counted the occurrence of students' and instructors' use of social presence cues in the discussion board postings. There were, therefore, two separate tasks that had to be completed prior to establishing interrater agreement. I provided both of the assistants with a copy of the GRCIT and discussed the seven items listed with each scorer individually. I created a social presence cues tally sheet, providing room for the assistants

to mark each occurrence (Appendix O). I collected samples of discussion board postings similar to those that they would be scoring and tallying during the study. After the assistants scored the first set of discussion board postings and counted the social presence cues used, I found that the assistants were having difficulties identifying both the GRCIT critical thinking skills and the social presence cues.

I met with these research assistants in person, and I provided additional face-to-face training. As I was preparing for this second training session, I realized that the reason the scorers might be having problems was because the GRCIT was designed specifically for written essays or papers. So, I adapted the scoring guide based on wording that is more appropriate for the discussion board. The research assistants scoring the essays reviewed my adaptations and verified that the wording adaptations did not compromise each item's intent. I reviewed and discussed this adapted version of the GRCIT with the discussion board assistants during our training.

The discussion board research assistants also were having trouble consistently identifying the social presence cues in the postings based on the eight different social presence cues. I realized that I needed to operationalize these social presence cues to provide more explicit guidance for the research assistants. During our training the two assistants and I discussed possible examples of each of the eight social presence cues. So, I developed a guide with samples of possible social presence cues (Appendix S). After developing this guide, I returned to the social presence cues literature. Neither Wise et al. (2004) nor Rourke et al. (1999) provided a detailed list of possible social presence cues. Rourke and his colleagues provided a discussion about social presence cues, but they only provided a few samples of each. In order to remain consistent in scoring, the

research assistants and I determined that they would score the occurrences of the eight social presence cues discussed on the guide. This guide operationalized social presence cues and facilitated the research assistants' counting of the cues.

Table 3

The Guide Developed to Operationalize the Eight Social Presence Cues for Scoring Consistency

Social presence cues that *reveal* the instructor	Description/Examples
Expressing humor	• Telling jokes *(an actual joke)* • Sharing humorous experiences or stories *(sharing an " I remember the time" kind of story or experience that is upbeat and/or humorous)*
Exhibiting emotions	• Using emoticons such as :O) or :O(• Using words in caps for emphasis • Using punctuation marks for emphasis *(any use of explanation points only)*
Providing self disclosure	• Sharing personal stories *(any kind of "I remember the time" story or experience)* • Providing background information *(sharing family, friend, occupation, or other personal information)* • Sharing plans or dreams *(sharing of goals, plans, dreams, hopes etc*
Interjecting allusions of physical presence	• Using terms such as *today in class*, *our class*, *your classmates, etc.* • Saying things like *working in groups*, *I'm glad to be with you today, I really enjoyed our time together, etc.* • Using terms that sounds as if students are in same room with instructor like *welcome to our class, join me as we…., Let's turn in our books etc.*
Using greetings	• Using terms such as *hi, hello, welcome, greetings, or any other type of greeting that you recognize.*
Addressing people by name	• Using one's name when replying to a comment, providing feedback, or offering suggestions.
Complimenting others' ideas	• Pointing toward others' ideas (*You should read John's and Fred's postings; they discussed the same ideas that you did or Have you read Sally's posting? She discusses the same ideas (or something referring to something someone else said).* • Recognizing the really strong points someone makes *(Susan made this same great observation; check hers out)* • Suggesting that one participant correspond with another *(Why don't you email or correspond with Jacob and share your thoughts about the story?)*

Table 3 (continued)

Social presence cues that *recognize* the other participants	Description/Examples
Offering support or agreement for an idea	• Providing other suggestions to support established ideas *(I think you are on the right track. I thought that she really died from something other than a heart attack too. Remember she created a whole new life for herself while she was in her room* or *I do think that Cross was creating a whole life with her in his mind. She really did not do anything to indicate she felt the same way.)* • Sharing similar opinions in agreement for an idea *(similar to above)* • Agreeing with points already made and then suggesting further thoughts *(I agree with you that she died more from just a heart attack. Tell me what you think the Chopin means when she writes "the joy that kills." Or I agree with you that the literary devices really make this story more exciting. Give me a few more examples of the literary devices from the story that really help the reader "get into" it.*

Once the discussion board postings had been scored, I completed a calculation of summed scores to determine interrater agreement. I added all scores the two raters had in common and divided the sum by the total points scored. After completing the calculations, I found that the interrater agreement for the research assistants scoring the discussion board postings for critical thinking was 93%. I used the same type of calculation to determine interrater agreement on the social presence cues. After summing the total number of social presence cues that the research assistants found to be the same in each category, I divided this number by the total reported social presence cues. Interrater agreement for the occurrence of social presence cues was 91%.

Control Variables

Pretraining and Postraining Analyses

My main strategy for accounting for differences among students other than those isolated and measured in the study was to administer pretraining and posttraining

assignments. The pretraining assignments were used as a control for previous student achievement in critical thinking in the context of the discussion board and essay. The study was administered in three distinct segments. The pretraining segment included two discussion board postings, a reading heuristic, and an essay question on short stories. These items served as the pretest data. The posttraining segment consisted of the same type of assignments; the only difference from the pretraining assignments was the genre. It was, unfortunately, not possible under the constraints of this particular university's curriculum to control for prompt effects such as the difficulty of a genre of literature by administering the writing test in a counterbalance design. The posttraining literature was drama rather than the short story.

Dependent Variable for the Social Presence Hypotheses

Instructors' Social Presence Cues

My first hypothesis predicted that the instructors in the situational treatment would use more social presence cues after training than they did prior to the training. To measure the number of both instructor and student social presence cues in each discussion board posting, I developed a social presence counting instrument that listed the 8 social presence cues and provided room for the discussion board scorers to mark incidences of social presence (Appendix O). Once the incidences of social presence had been tallied and entered into SPSS, I analyzed these data by employing the repeated measures.

The pretraining social presence cues aided me in establishing an understanding as to whether the instructor might spontaneously already be using social presence cues.

Because I am interested in the situational treatment instructors' social presence cues, both pretraining and postraining compared to the cognitive treatment instructors, I used pretraining social presence cues and the treatment as independent variables.

Students' and Instructors' Social Presence Cues

My second hypothesis predicted that the incidence of instructor social presence cues will correlate with the incidence of students' social presence cues in discussion board postings. In order to determine if there was a correlation between the incidence of students' social presence cues and instructors' social presence cues on the discussion board, I employed a Pearson correlation.

I used a Pearson correlation to determine if there were significant correlations between the instructors' social presence cues and those of the students. I determined the relationship between the total number of instructor social presence cues and those of the students. I also performed a correlation in which I split the data by treatment and repeated the correlation.

Dependent Variable for the Achievement Hypotheses

Situational Students' Critical Thinking Scores (Written Argumentation)

My third hypothesis predicted that the students who were in the situational treatment instructors' classes would achieve higher quality written argumentation than those who were in the cognitive treatment instructors' classes. Determining the answer to this hypothesis took several steps because I had to use both the critical thinking scores and the incidences of social presence. Two of the research assistants used the GRCIT to determine the students' critical thinking scores in their essays (Appendix J). The other

research assistants used the GRCIT to determine the students' critical thinking scores on their discussion board postings. These same scorers also used the social presence instrument to count the number of social presence cues in each discussion board posting. Once all of the data had been inserted in SPSS, I analyzed the students' critical thinking scores and the incidences of student social presence cues by running a mixed design analysis.

Students' Achievement Scores

My fourth hypothesis stated that the students' use of social presence cues will predict students' achievement of development of written argument. In order to determine if this hypothesis is true, I compared the students' use of social presence cues to the students' critical thinking scores. I analyzed the data by simple regression, using the posttraining essay as my dependent variable.

Students' Incidence of Critical Thinking

The fifth hypothesis predicted that students' use of social presence cues will correlate with the incidence of individual and/or collaborative critical thinking. The budget for this project required that research assistants serve as volunteers. I could not ask the assistants to do additional work to score data for this hypothesis on the timeline given that they were working on a volunteer basis.

I did, however, analyze the available data by using a simple regression analysis to determine if the students' use of social presence cues predicted their critical thinking scores on the discussion board.

CHAPTER IV. RESULTS

This chapter begins with this initial discussion of the instructor training, both cognitive and situational. The emphasis in this account is on qualitative indications of the instructors' perceptions of the two versions of the training. These qualitative data are included not as a full qualitative analysis but to provide a backdrop for the instructors' training experiences and to provide a background for the quantitative results. In addition to the training, this chapter will provide the descriptive statistics for all four of the collected assignments. These descriptive data are presented by instructor and also by treatment. Repeated measures, correlation, mixed model design, and simple regression are used to determine the results of the various hypotheses tested in the study.

Instructor Training

Cognitive Instructors

Each of the instructors was randomly assigned to a training session. The treatments were similar with the exception of the social presence training in the situational treatment (see Table 1). The instructors were asked to participate in a two-week study that I designed (Appendix Q). There were various levels of participation in the study.

Instructors 1 and 3 were assigned to the cognitive treatment. During Instructor 1's initial interview I found that although Instructor 1 believed that she had attempted to interject her personality into her course, she did not believe that her students were affected by these attempts. In a question on critical thinking, Instructor 1 revealed that she felt critical thinking was an important aspect of her class. She stated that her class consisted of many discussion board postings that help the students prepare to write their essays. When asked if she believed that students naturally think critically, she provided interesting insight on instructing students to think critically.

> *No. Critical thinking is a learned behavior and students must be guided through the critical thinking and writing process. It is an erroneous belief on the part of many educators that critical thinking is an innate skill. Students need the tools to process the text, question the text, and come to their own conclusion about the text. They then must be instructed in how to effectively communicate that conclusion to their audience.*

Instructor 1 did not respond to the students' postings on the discussion board; therefore, I am unable to determine ways she teaches students to think more critically.

Because of the duties of her full-time job, Instructor 1's participation in the training was minimal. She joined and reviewed all the materials I had provided, but she did not interact with Instructor 3 or exchange information. She e-mailed me to explain that she was overwhelmed with her full-time job and would not be able to complete the training.

In her concluding interview Instructor 1's definitions of critical thinking and argument remained the same. She offered an answer that allowed me to see that she

recognizes the constructivist nature of the course that I designed and provided. When asked if she felt more confident with the content to encourage students to use critical thinking skills and to encourage them to aim to write high-quality arguments, she responded,

> *I have always felt confident about my ability to encourage critical thinking skills. The issue with online education is that the burden of learning is on the student; he or she must make the time for learning that would have naturally occurred in the classroom.*

Instructor 1 asserted that the student is responsible to his or her own learning, and the student may have even more responsibility because he or she must accomplish activity physically removed from the teacher and classmates that could be provided face-to-face by the teacher in a bricks-and-mortar classroom.

Instructor 3 was the more active participant in both the course and the cognitive treatment. When discussing asserting her personality into the course, Instructor 3 said she not only tries to interject her personality into the class, but she also uses her life experiences as a “student, soldier, wife, mother, mentor, leader, and teacher” to reach her students. Instructor 3 was a proponent of the discussion board and said she used it in every online course. When asked if she thought that students’ critical thinking comes naturally, she said,

> *Some students apply different solutions to problems and evaluate them while other students look for the commonly used answer. Students think critically when they are challenged to look at alternatives for solutions. Some students can do this*

naturally, but others need to understand the process of analysis, implementation, and evaluation of problems.

Instructor 3 acknowledged that some students initially are better able to think critically than others. In discussing the need for some students to more fully understand the processes of analyzing, implementing, and evaluating problems, she alluded to the opportunity instructors have to teach these subprocesses of developing a written argument.

Although Instructor 3 was unable to follow the day-by-day schedule, she did complete most of the training session. Because of unexpected changes at work, Instructor 3 did not complete the final two assignments in the training. I interacted with Instructor 3 on the discussion board to allow her to exchange thoughts and ideas with someone else. Instructor 3 is a seasoned English teacher, and she provided much insight during the training.

Instructor 3 suggested that it is her experience that when students are presented with a list such as with the eight subprocesses, they do often only use the ones that pertain to them, and they do not use all of the items provided. When asked how she might adapt the eight subprocesses of an argument, she explained that she might consolidate the eight subprocesses to four, hoping that the students will focus on fewer items.

Subprocess 1 - Identify the problem with relevant data

Subprocess 2 - Define the problem and possible solutions

Subprocess 3 - Compile evidence

Subprocess 4 - Conclude - based on data and evidence

Instructor 3 shared much valuable information in the telephone interview after the training session ended. She was very apologetic for not completing the last assignments in the training. Although she did not complete the training, Instructor 3's responses were quite valuable.

Instructor 3 found the discussion board features of the training and course design among the most valuable elements of the study. She explained that she had previously used the discussion board, She had not, however, used it to the extent that the training and course design suggested. Instructor 3 maintained that the questions for discussion provided new avenues of thinking for the students and better prepared them for their essays. Instructor 3 acknowledged the scaffolding in the course design when she noted that, "each step of the training was advancement to a higher form of learning—Discussion board→Questions→Essay."

Instructor 3 provided informative feedback and suggestions for future studies in her final telephone interview. When asked if she saw changes in her students' critical thinking skills, she reported the following:

> *Several changes took place. The reading, questions, discussion board, and essay begin setting a pattern for elevated thinking and analysis. Some had an extremely hard time with this as they have been taught to read, review, and recite back what they read. I feel the majority of students benefited from this session. I do think, however, that if the students were introduced to the process of critical thinking, some basic steps involved, and* REASONS *why this leads to higher learning and the decision making process, prior to taking the class, they would approach the*

class with some background and reasons why this type of learning is recommended.

Instructor 3 reflected as to whether her thoughts about critical thinking and argument development had changed after the training. She responded,

My thoughts did not necessarily change after the training but rather opened up more possibilities in which I could challenge the students to not only think critically but write critically. Students were making valid arguments based on reading, discussing, and rereading the text.

Instructor 3 recommended that students might be taught the preliminary concepts of critical thinking and argument development in the final writing assignment ENG 1101. She suggested that providing background information in the previous class might provide the students a better foundation when coming into this more demanding, ten-week course. Instructor 3 provided several recommendations for future training that will be discussed in chapter 5.

Situational Instructors

Instructors 2 and 4 were randomly assigned to the situational treatment. They both were active participants in the study. Not only did they post the assignments, but they also had several exchanges about the postings, sharing what has worked for them and what has not. Most of the discussion board assignments had at least two to three sets of exchanges between the two instructors.

Instructor 2 actively participated in both the training and the study. In her initial interview, when asked if she interjects her personality into her online class, she replied, "Most definitely!" She said she tries to let her personality show when she participates on

the discussion board, leaves comments on students' essays, and in her course notes. She recognized that it is important to allow one's personality to show because she thinks there is a perception that instructors often appear to be unapproachable due to the fact that they are unseen. Therefore, she uses many emoticons in her writing to students. When asked if she believed that critical thinking comes naturally for students, Instructor 3 said,

> *Oh, NO! Most students immediately turn to reporting as opposed to analyzing. Retelling comes much more easily and more naturally to most people that trying to see beyond the obvious.*

Instructor 3 recognized that many students are unaware of how to analyze a piece of writing. Because of this lack of understanding, students often resort to telling what they read rather than what they learned or understood in the reading.

Rather than just changing the wording on the eight processes of argument development, both instructors 2 and 4 elaborated on my subprocesses, providing questions to further explain each (Table 4).

Table 4

Instructor 2's Revisions of the Eight Subprocesses of Argument Development

Subprocess	Subprocesses of Argument Development
Subprocess 1	Pinpoint the problem – *What is it that you actually intend to prove?*
Subprocess 2	Sift through the data to extract possible data relevant to the problem – *Research for material that only DIRECTLY relates to the issue at hand.*

(table continues)

Table 4 (continued)

Subprocess	Subprocesses of Argument Development
Subprocess 3	Introduce a hypothesis to represent working understanding of data relevant to the definition of the problem – *What conclusion does this lead you to?*
Subprocess 4	Explore other possibilities, searching for both confirmation and disconfirmation of hypothesis – *Allow for other ideas.*
Subprocess 5	Compile evidence for consideration of most developed and defensible possibilities – *Pull your strongest points together.*
Subprocess 6	Establish a conclusion – *What does all of this tell us?*
Subprocess 7	Extract evidence from data collection to uphold conclusion – *How can you prove this to the reader?*
Subprocess 8	Explain how and why the evidence reinforces the conclusion – *Spell it all out for the reader.*

Note. Questions in italics are the instructor's additions.

Instructors 2 and 4 completed all of the assignments, posting them when required, and they discussed their postings in exchanges on the discussion board. They interacted about the short story question heuristic, the discussion board questions, and the outline of the essay. By participating in these assignments, the instructors may have guided should have a better understanding of that which they were asking their students to complete and write.

Instructor 2 found several new suggestions valuable in the study. In her telephone interview after the training, she spoke about her new realization about the discussion board. She said she had come to realize that, "my attention to feedback on the discussion board could have a direct effect on my students' critical thinking. A little bit of time on my part might have a HUGE impact on the tone and direction of the discussions." Instructor 2 implemented more involvement in the discussion board postings in weeks 5 and 6.

In her final telephone interview, Instructor 2 realized that once the students recognized that she was actually reading their postings, they started "digging deeper and thinking critically." In the last two weeks of the study, Instructor 2 realized that the students had turned from retelling stories to attempting to answer the questions. The instructor perceived the discussion board postings that she facilitated during the study to be the best interactions in which she had ever participated. She reported that the tone stayed positive and encouraging. When asked if she would provide similar discussion board postings in future classes, she replied,

Yes, because I really believe this is going to result in happier students who feel they had a more "real" experience than usual in an online course. This added an element of community that most discussion boards don't.

Instructor 2 offered her thoughts on critical thinking and argumentation after the training. She said, "Yes, my thoughts have definitely changed. Some of the discussions in the training were just a refresher, but I definitely saw how simple things like wording made a huge difference in student critical thinking." Instructor 2 asked her students for feedback about the course. Students' responses will be presented in chapter 5.

Instructor 4 actively participated in the study and the training. When asked in the initial interview if she thought that her personality shows in her courses, Instructor 4 replied, “Oh, yes! I have a dry sense of humor and a no-nonsense approach. It shows in my postings because I let it.” In the initial interview, Instructor 4 discussed critical thinking and answered the question posed as to whether she thought critical thinking came naturally for students. She stated, “No, the natural inclination is to state facts and the obvious rather than to look deeper.” Instructor 4 has been aware of this lack of critical thinking for several years, and in her own courses she provides students with information and encouragement about thinking more critically throughout the entire course.

Like in the training, Instructor 4 added an additional question to the eight subprocesses of argument development that I presented them in the training. Rather than change what I had provided, she decided to just provide questions that would help a student better understand what each subprocess asked the student to do (Table 2).

Table 5

Instructor 4’s Submission for Altering the Eight Subprocesses of An Argument to Make This Document More Student Friendly

Subprocesses	Subprocesses of Argument Development	*Translation*
Subprocess 1	Pinpoint the problem	*What do you need to know?*
Subprocess 2	Sift through the data to extract possible data relevant to the problem	*What information are you given?*

(table continues)

Table 5 (continued)

Subprocesses	Subprocesses of Argument Development	*Translation*
Subprocess 3	Introduce a hypothesis to represent working understanding of data relevant to the definition of the problem	*What do you believe based on the information?*
Subprocess 4	Explore other possibilities, searching for both confirmation and disconfirmation of hypothesis	*What other possible answers are there to the problem?*
Subprocess 5	Compile evidence for consideration of most developed and defensible possibilities	*Which answers are the most likely and why?*
Subprocess 6	Establish a conclusion	*Which answer have you chosen?*
Subprocess 7	Extract evidence from data collection to uphold conclusion	*What evidence exists for this answer?*
Subprocess 8	Explain how and why the evidence reinforces the conclusion	*How does the evidence support the answer?*

Note. The translation column was added to help the students better understand the subprocess.

As previously mentioned, Instructors 2 and 4 completed all of the assignments, posting them when required, and they discussed their postings in exchanges on the

discussion board. They interacted about the short story question heuristic, the discussion board questions, and the outline of the essay. By participating fully in these assignments, the situational treatment instructors may have gained a better understanding than the cognitive treatment instructors of that which they were asking their students to complete and write.

In the telephone interview after the training, Instructor 4 proposed that one of the most valuable aspects of the training was interacting with Instructor 2. She recognized the value of these exchanges because the two instructors approached similar situations in different ways, and by sharing their different tactics, the other instructor was given a new perspective to consider.

It is interesting to note that Instructor 4's responses in the final telephone interview were opposite those of Instructor 2. Although Instructor 4 found that the training was valuable because it encouraged her to reflect on her own teaching, she did not recognize any change in the students' critical thinking after the training. She explained that "No, mainly because students are fairly set in their ways and there is a disconnect between what instructors think is critical thinking and what students think is."

Instructor 4 said that the discussion board assignments were effective because most students enjoy exchanging information with others. In addition to perceiving that the exchanging of information is interesting to her students, Instructor 4 said she would continue to use this discussion board concept because it increased the interaction among the students.

When asked if her thoughts on teaching students' critical thinking or development of high-quality arguments had changed, Instructor 4 responded by saying that her

thoughts had changed slightly. She was reminded that sometimes we have to translate concepts for our students if we want them to truly understand the concept or task. Instructor 4 proffered several suggestions that will be discussed in chapter 5.

Study Results

The following are the quantitative results from the study. Using multiple regression and bivariate correlations, I was able to test four of my five hypotheses. The presentation of the data begins with descriptive statistics on social presence cues and achievement scores by instructor and treatment.

Table 6

Descriptive Statistics for Social Presence Cues and Achievement by Instructor and Treatment

Instructor	Variables	Time	Mean (Std.)	Instructor	Variables	Time	Mean (Std.)	Cog avg.
1 (cognitive)	Instr cues	Pre	.000 (.000)	**3 (cognitive)**	Instr cues	Pre	2.333 (2.338)	1.167 (1.169)
		Post	.000 (.000)			Post	6.167 (3.642)	3.084 (1.821)
	Stud cues	Pre	.591 (.917)		Stud cues	Pre	.917 (1.429)	.322 (1.173)
		Post	.546 (.789)			Post	.917 (.917)	.732 (.853)
	achvmnt disc board	Pre	14.632 (2.524)		achvmnt disc board	Pre	17.267 (1.338)	15.950 (1.931)
		Post	14.621 (2.828)			Post	14.560 (2.238)	14.591 (2.533)
	achvmnt essays	Pre	13.490 (3.058)		achvmnt essays	Pre	14.833 (3.028)	14.162 (3.043)
		Post	14.667 (2.066)			Post	16.677 (1.277)	15.672 (1.672)

(table continues)

Table 6 (continued)

Instructor	Variables	Time	Mean (Std.)	Instructor	Variables	Time	Mean (Std.)	Sit avg.
2 (situational)	Instr cues	Pre	6.833 (3.661)	**4 (situational)**	Instr cues	Pre	.833 (1.060)	3.833 (2.361)
		Post	9.291 (4.369)			Post	3.611 (1.884)	6.451 (3.127)
	Stud cues	Pre	1.896 (2.498)		Stud cues	Pre	1.056 (1.333)	1.476 (1.916)
		Post	1.979 (2.712)			Post	.833 (.7071)	1.406 (1.710)
	achvmnt	Pre	16.673 (2.023)		achvmnt	Pre	17.889 (1.917)	17.281 (1.970)
	disc board	Post	14.571 (2.785)		disc board	Post	15.603 (2.359)	15.087 (2.572)
	achvmnt	Pre	14.650 (2.433)		achvmnt	Pre	14.778 (2.333)	14.714 (2.390)
	essays	Post	15.924 (2.564)		essays	Post	16.420 (2.284)	16.172 (2.424)

Descriptive Results by Variable

Several findings are explained by reviewing Table 6. The means for three of the four instructors' (i.e., instructors in both treatments) incidence of social presence cue usage increased from the pretraining postings to the posttraining postings (Instructor 1 did not participate on the discussion board). The means for the students' incidences of social presence cues, however, did not increase as expected. Only the students for instructor 2 had an increase in the mean for the incidence of social presence cues usage after the situational treatment instructors' training.

The means for student achievement scores for critical thinking on the discussion boards decreased from the prettraining postings to the posttraining postings. There were two discussion board postings in both segments of the study. I performed a repeated measures analysis on the pretraining and posttraining discussion board critical thinking scores in both treatments to determine if there was a significant difference in the means. The results reported that there was a statistically significant difference between the pretraining and posttraining discussion board critical thinking scores in the situational

treatment (p = .000). The critical thinking scores in the cognitive treatment did not reach statistical significance (p = .170). Table 7 provides a statistical view of the results discussed here.

Table 7

Repeated Measures Results for the Pretraining and Posttraining Discussion Board Critical Thinking Scores for Both Treatments

Treatment	Time	*N*	Mean (Std.)	Sig.
Cognitive	Pre	17	15.562 (2.500)	
	Post		14.560 (2.562)	.170
Situational	Pre	33	17.005 (2.041)	
	Post		14.853 (2.680)	.000

The means for the essay achievement scores increased from the pretraining to posttraining essays. I used SPSS to create histograms for the pretraining and posttraining essay scores by treatment (Table 6). When analyzing the cognitive treatment pretraining essay achievement scores histogram, I found that eight students scored below the mean (14 points). Nine students scored above the mean. This being a 21-point scale, I noticed that 4 students scored in the top 25% of the class. In the posttraining essay achievement scores histogram, I noted that only 3 students scored below the same mean that was used in the pretraining histogram (14 points). This suggested that more than half of the lower end students moved more toward the middle of the curve. The fourteen remaining

students scored above the mean. In the posttraining histogram, six students scored in the top 25% of the class in the posttraining analysis.

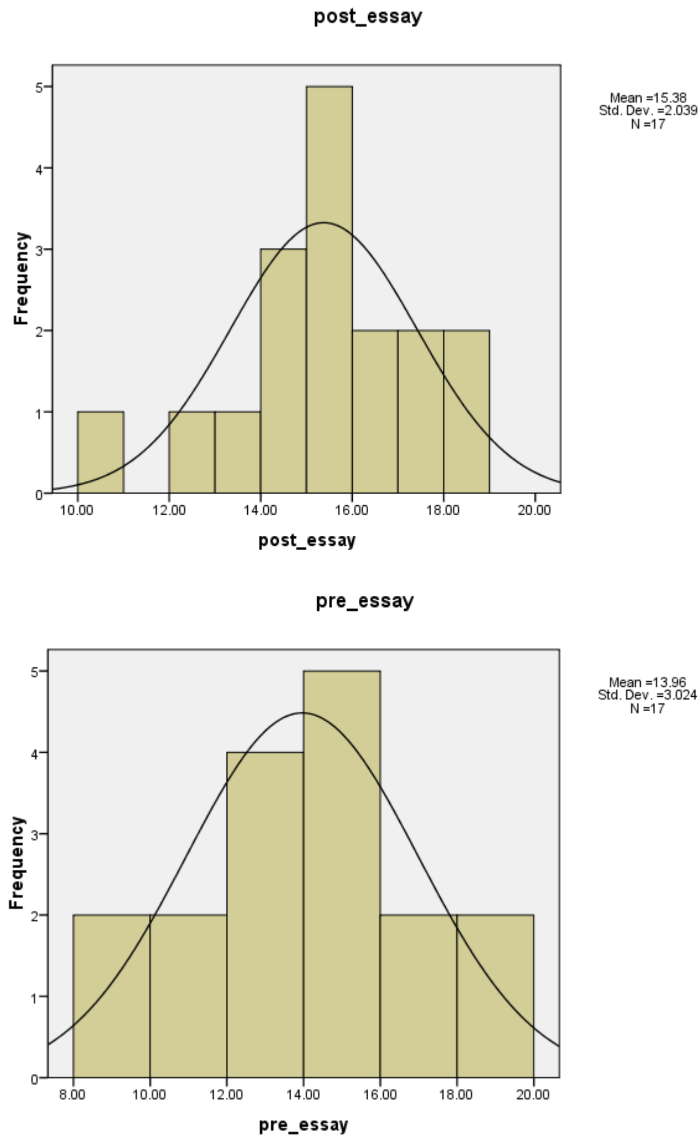
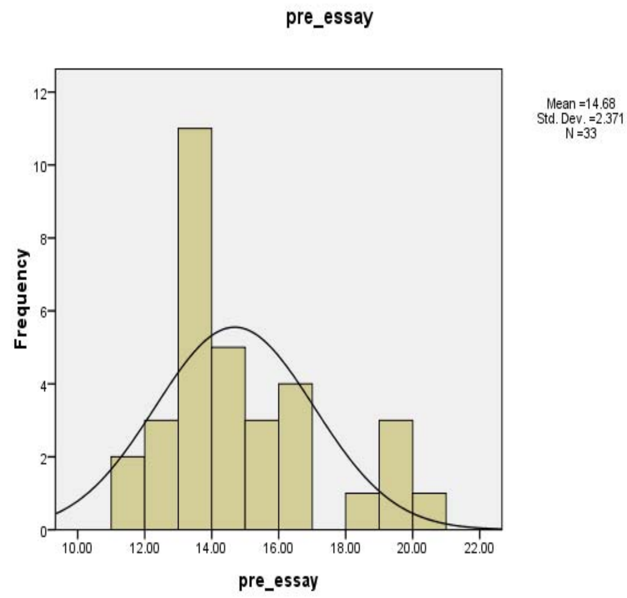


Figure 8. Cognitive treatment pretraining and posttraining essay achievement scores histograms.

Using the same prerequisites as with the cognitive treatment, I found that sixteen students were below the mean (14 points). Of the seventeen students who scored above the mean, twelve students scored in the top 1/3 of the class. In the posttraining essay achievement scores histogram, nine students scored below the mean. This finding pointed out that almost half of the students who scored below the mean in the pretraining histogram demonstrated more critical thinking in their posttraining essays, scoring higher than the mean. Of the remaining twenty-four students who scored above the mean, fourteen of those students scored within the top 1/3 of the class.



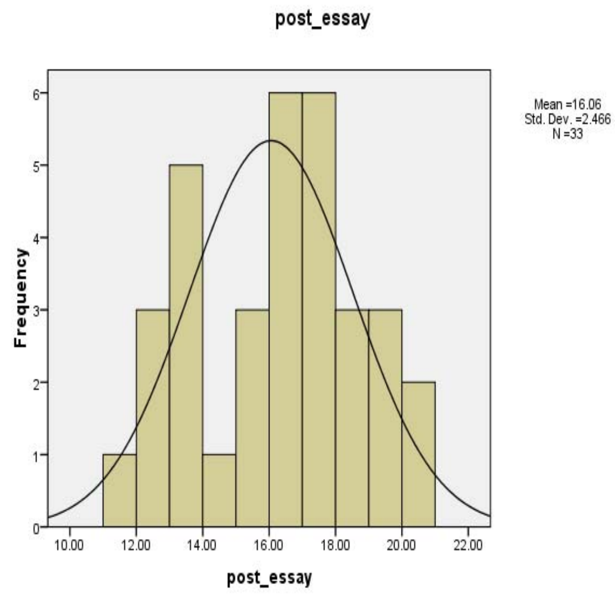


Figure 9. Situational treatment pretraining and posttraining essay achievement scores histograms.

The findings in both the cognitive and situational treatments showed a move from the students on the lower end of the points scale toward the middle. I found that the number of students in the upper 1/3 of the class increased as well. A valuable finding is that the instructors were able to provide instruction on critical thinking that helped the lower end students increase their scores, and it is even more valuable to note that the upper end students maintained their higher essay achievement scores.

Descriptive Results by Instructor

The descriptive statistics on Table 6 specifically report the mean averages and standard deviations disaggregated by instructor and labeled according to the treatment in which each instructor participated.

Cognitive Treatment Instructors

Both Instructor 1 and Instructor 3 posted the proper discussion board questions and provided the essay questions; however, Instructor 1 did not participate in the discussion board. Therefore, the instructor' participation did not influence the findings in the study. It is interesting to note that, even without instructor participation, there is a slight measurement in student participation on the discussion board. Although Instructor 1 did not provide constructive feedback to her instructors on the discussion board postings, there is an increase in the pretraining and posting means for the essay achievements (instances of critical thinking).

Initially, Instructor 3 participated infrequently on the discussion board, demonstrating fewer incidences of social presence cues. There is large difference in the means for Instructor 3's participation and use of social presence cues on the discussion board from pretraining to posttraining. There is a 3.834 point increase in the mean on

instructor's social presence cues. There is also an increase in the standard deviation scores. Even though the mean for incidences of students' social presence cues remains the same prior to and after the training, the standard deviation increases slightly.[6]

When reviewing the average scores for the two cognitive treatment instructors, I find that the average means for the instructors' and students' social presence cues for both pretraining and posttraining increase. There is a slight decrease in the average means for students' achievement scores on the discussion board; there is an increase in the average means for students' essay achievement scores.

Situational Treatment Instructors

Both Instructor 2 and instructor 4 participated on the discussion board and used the provided essay questions. When looking at the descriptive statistics for Instructor 2, one sees that the mean for the pretraining incidences of social present usage is higher than any of the other instructors' posttraining results, reporting that Instructor 2 interacted with the students using social presence cues prior to the situational training. Even with the high mean in the pretraining discussion board postings, Instructor 2's mean increased significantly on the posttraining discussion board postings. Of the four instructors, Instructor 2 was the only one to have an increase on the students' incidences of social presence cues usage. Instructor 2's class population consisted of eCampus students, civilians and possibly soldiers using tuition assistance.

There is also a visible increase in the means for Instructor 4's incidence of social presence cues usage on the prettraining and posttraining discussion board postings. Instructor 4's class consisted of soliders in the eArmy program. Although it was expected that the students' incidences of social presence cues usage would increase, the decrease

might be explained due to the non-disclosure of personal information and sedulous lifestyle of an Army student.

When reviewing the average scores for the two situational treatment instructors, one will recognize a very modest increase in the mean and a small increase in the standard deviation for instructors' usage of social presence cues in the posttraining segment. A decrease in both the mean and standard deviation for students' usage of social presence cues remains. The mean and standard deviation scores for student achievement on the discussion board are lower in the posttraining average for the situational treatment. One will see an increase in the posttraining mean and standard deviation for the essay achievement scores.

The Students' and Instructors' Social Presence Cues Hypotheses

Two of my hypotheses were associated with students' and instructors' social presence cues. As stated in Chapter Three, the **first hypothesis** is

> *Following training in the use of social presence cues, instructors will use these cues more than they did before social presence cues training.*

Table 8 reports an increased mean and standard deviation in the posttraining social presence cues in the situational treatment. I included the data from the cognitive treatment for comparison.

Table 8

Descriptive Statistics for the Independent Variables (instructor pretraining social presence cues) and the Dependent Variable (instructors' posttraing social presence cues)

	Instructor Pretraining social presence cues Mean (Std.)	Instructor Posttraining social presence cues Mean (Std.)
Situational Treatment	5.197 (4.157)	7.742 (4.605)
Cognitive Treatment	.824 (1.741)	2.177 (3.757)

N = 50 students

In order to assess whether or not the instructors' use of social presence cues after training differ at a statistically significant level, I completed a two-level within-subjects analysis of variance (ANOVA) with the instructors' posttraining social presence cues as the dependent variable. Alpha was set at .05, and the results were statistically significant, $F\ (1,32) = 9.307$, $p = .005$ (Table 9). Thus, the results indicate that the situational instructors used more social presence cues after their training. Additionally, the effect size was large, $\eta^2 = .225$. Because the treatment reached statistical significance, the null hypothesis was rejected.

Table 9

Repeated Measures Analysis of Situational Treatment Instructors' Use of Social Presence Cues After Training

Variable	*F*	*df*	sig	η^2
Situational instructors' use of social presence cues	9.307[a]	1, 32	.005	.225

Computed using alpha= .05

N = 50 students

The **second hypothesis** refers to a correlation.

The incidence of instructors' social presence cues will correlate with the incidence of social presence cues in students' discussion board posts.

In order to determine if there was a correlation between the incidence of instructor' and student' social presence cues on the discussion board postings, I used Pearson correlations. The results of the correlations demonstrated in Table 10 show that there is a correlation between instructors' and students' use of social presence cues on the discussion board (r = .332, p = .018). Because the findings were statistically significant, the null hypothesis was rejected.

Table 10

Pearson Correlation of Instructors' and Students' Total Use of Social Presence Cues

	Instructors' total social presence cues	Students' total social presence cues
Instructors' total social presence cues		.332* *p*= .018
Students' total social presence cues	.332* *p*= .018	

N = 50 students

*Correlation is significant at the 0.05 level (2-tailed)

A second correlation was run to analyze the pretraining and postraining usage of social presence cues, disaggregated according to whether before or after training, to see if there is a correlation between the students' and the instructors' social presence cues based on having experienced the training. Table 11 reports the findings of this analysis.

Table 11

Pearson Correlation to Determine Relationships between Instructors' and Students' Pretraining and Postraining Usage of Social Presence Cues[7]

	Instructor pretraining social presence cues	Student pretraining social presence cues	Instructor posttraining social presence cues	Student posttraining social presence cues
Student pretraining social presence cues	.300* *p*= .034			
Instructor posttraining social presence cues	.571** *p*= .000	.163 *p*= .258		
Student posttraining social presence cues	.248 *p*= .082	.541** *p*= .000	.328* *p*= .020	

*Correlation is significant at the .05 level (2-tailed)

**Correlation is significant at the .01 level (2-tailed)

Table 11 reports that there is a correlation that achieved statistical significance between instructors' and students' pretraining use of social presence cues (r = .300, p = .034). The instructors who demonstrated more usage of social presence cues pretraining

also had students who used social presence cues as well. The correlation between the students' and instructors' use of social presence cues in the posttraining discussion board postings achieved statistical significance ($r = .328$, $p = .020$). This correlation explains that the instructors using more social presence cues in the posttraining had students using more social presence cues as well. There is a strong correlation between the instructors' pretraining and posttraining usage of social presence cues ($r = .571$, $p = .000$). This correlation explains that the instructors using more social presence cues prior to the training also used more social presence cues after the training.

A final observation is the correlation between students' pretraining and posttraining use of social presence cues ($r = .541$, $p = .000$). This correlation points out that the students using social presence cues prior to the instructors' training continued using the social presence cues after the training. Instructor 4 has a bigger decline in incidence of students' social presence cues than the other instructors. The cause of this decline is unknown. The small number of instructors may have affected the results and data.

The Students' Achievement Hypothesis

The **third hypothesis** pertains to the students' achievements on the discussion board and in their essays. Achievement in both writing assignments is measured in terms of critical thinking.

> *Students who experience the condition of their instructors' situational treatment training will achieve higher quality written argumentation than students who experience the condition of their instructors' cognitive treatment training.*

Table 12 reports the means and standard deviations for the mixed design analysis on students' achievement scores on their essays in the situational and cognitive treatments.

Table 12

Descriptive Statistics for Mixed Design Analysis on Students' Pretraining and Posttraining Achievement Scores on Their Essays in Both Treatments

	Students' pretraining essay achievement scores Mean (Std.)	Student's posttraining essay achievement scores Mean (Std.)	Both treatments' essay achievement scores Mean (Std).
Situational treatment	14.685 (2.371)	16.060 (2.466)	
Cognitive treatment	13.964 (3.024)	15.377 (2.039)	
Pre			14.440 (2.603)
Post			15.827 (2.331)

N = 50 students

To address this hypothesis asking whether or not the students of the situational training instructors had higher quality written argumentation than students of the cognitive training instructors, a repeated-measures ANOVA with a within-subjects factor (pretraining essay and posttraining essay) and a between-subjects factor (treatment) was completed. Results indicated that students with the situational treatment instructors

scored higher than those students with the cognitive treatment instructors at a statistically significant level, F (1,48) = 4.786, p = .034 (Table 13). The effect size was medium, η^2 = .091. Because the treatment was statistically significant, the null hypothesis was rejected.

Table 13

Mixed Design Analysis of Students' Posttraining Essay Achievement Scores, Analyzing the Situational Treatment Students

Variable	*F*	*df*	sig	η^2
Students' posttraining essay achievement scores	4.786	1,48	.034	.091

N = 50 students

The fourth hypothesis pertains to students' usage of social presence cues and students' achievement scores.

Students' use of social presence cues will predict students' achievement of development of written argument.

Table 14 reports the descriptive statistics for the means and standard deviations for the students' posttraining use of social presence cues and essay achievement scores.

Table 14

Descriptive Statistics for Regression Analysis of the Students' Essay Achievement Scores' Difference on the Students' Use of Social Presence Cues

Variable	Mean (Std).
Essay achievement scores difference	1.387 (3.278)
Students posttraining social presence cues	1.33 (2.039)

N = 50 students

A simple regression analysis was used to address whether or not the students' use of social presence cues on the discussion board, the independent variable, predicted their achievement of the development of a written argument, the dependent variable. Results indicated that there was not a relationship between the students' use of social presence cues and their achievement of the development of the written argument, $r = .056$, $p = .698$ (Table 15). The coefficient of determination ($r^2 = .003$) indicates that approximately .3% of the variance in the students' achievement scores can be accounted for by its linear relationship with the social presence cues. The statistical findings failed to reject the null hypothesis.

Table 15

Regression Analysis of Difference of the Students' Essay Achievement Scores' Difference on the Students' Posttraining use of Social Presence Cues

Variable	Unstandardized Coefficient	Standardized Coefficient	t	One-tailed P value
Constant	-1.508 (.560)[b]			
Students' posttraining use of social presence cues	-.091 (.232)[b]	-.056	-3.91	.698

Standard of error is [b]; $r^2 = .003$

The original fifth hypothesis stated a hypothesized relationship between the students' use of social presence cues and the students' incidence of critical thinking.

Students' use of social presence cues will correlate with the incidence of individual and/or collaborative critical thinking.

Because of financial constraints, I did not ask my research assistants to count the incidences of critical thinking on the discussion board. Since I did have data for students' use of social presence cues and incidence of students' use and holistic evaluation of critical thinking skills on the discussion board, I decided to analyze the data to determine if *students' use of social presence cues predicts students use of critical thinking skills on the discussion board posting when critical thinking is evaluated holistically.* Table 16 reports an unexpected decrease in the students' social presence cues from the pretraining to posttraining discussion board postings.

Table 16

Descriptive Statistics for Regression Analysis of Discussion Board Holistic Critical Thinking Scores' Difference on the Students' Posttraining use of Social Presence Cues

Variable	Mean (Std).
Discussion board holistic critical thinking scores' difference	-1.747 (2.579)
Students posttraining social presence cues	1.33 (2.039)

N = 50 students

A simple regression analysis was used to address whether or not the students' use of social presence cues on the discussion board, the independent variable, predicted the students' use of critical thinking on the discussion board postings, the dependent variable. Results indicated that there was not a relationship between the students' use of social presence cues and their use of critical thinking on the discussion board, $r = .232$, $p = .105$ (Table 17). The coefficient of determination ($r^2 = .054$) indicates that approximately 5.4% of the variance in the students' achievement scores can be accounted for by its linear relationship with the social presence cues. The statistical findings failed to reject the null hypothesis.

Table 17

Regression Analysis of Discussion Board Holistic Critical Thinking Scores' Difference on the Students' Posttraining use of Social Presence Cues

Variable	Unstandardized Coefficient	Standardized Coefficient	*t*	One-tailed *P* value
Constant	-1.357 (.429)[b]			
Students' posttraining use of social presence cues	-.293 (.178)[b]	-.232	-1.651	.105

Standard of error is [b]; $r^2 = .054$

CHAPTER V. IMPLICATIONS

I designed and implemented a study, which included instructor training, to determine the effects of incidences of instructors' social presence cues on online composition students' critical thinking skills and argument development. By categorizing eight social presence cues introduced by Rourke and his colleagues (1999), I further explained the social presence cues as *those that reveal the instructor* and those *that recognize the other participants*. So far as I know, this is the first time a study has investigated incidence of instructors' and students' social presence cues in association with an achievement variable that measured students' critical thinking and argument development in an online composition course.

Garrison and his colleagues (2000) argued that social presence is one of the key concepts in helping distance education students develop critical thinking skills. This study sought to test that claim. The small size of the sample in this study may have had an impact on the results. Further research on using social presence cues in freshman composition and other online college courses that systematically test propositions linking social presence cues with variables operationalizing learning is needed.

Referring again to the instructors' perceptions of the course to gain a better overall understanding of the study, I found that three of the four instructors who participated in this study were pleased with how the students interacted on the discussion

board postings. Although Instructor 4 had previously assigned discussion board postings with a certain number of postings for her students, both Instructors 2 and 3 found this type of discussion board interaction to be an element that they would encourage in future classes. When asked if they would continue to use the discussion board postings in this way, Instructors 2 and 3 replied,

> *Instructor 2*
>
> *Yes, because I really believe this is going to result in happier students who feel they had a more "real" experience than usual in an online course. This added an element of community that most discussion boards don't.*
>
> *Instructor 3*
>
> *Yes. I thought this was perhaps the best vehicle for the introduction of critical thinking in the study. The questions were excellent and gave each student an opportunity to express their ideas and support them with examples from the readings.*

Aside from the possible opportunities for student satisfaction and critical thinking that incidences of social presence might engender, a practical implication of this study is that regardless of whether the instructors used social presence cues in their postings, discussion board interactions, prompted by an assigned question, and the reading heuristics may be useful for encouraging critical thinking.

This concept of using social presence cues as a means to encourage students to think more critically as they move toward written argumentation in online composition courses is not at the point for teacher deployment. In this last chapter I will discuss particular implications of the study findings for online composition instructors' use of

social presence cues in online composition courses, implications for online composition instructors' development of online opportunities to encourage students' critical thinking, implications for instructors' course designs, and, finally, implications for the field of online composition. I will close with recommendations for future research and development, including recommendations for further exploration and instructor training on the incidence of both instructors' and students' social presence cues and the relationship to students' critical thinking and argument development.

Implications for Online Composition Instructors' Usage of Social Presence Cues in Online Composition Courses

Although the study did not find that students' incidences of social presence cues usage predicted high discussion board or essay achievement scores, social presence cues may still have a significant role in online learning, including online composition. In his qualitative study on students' experiences with social presence in an online course, Kehrwald (2008) provided a more recent definition of social presence that describes it as a means by which online participants let other participants know they are present in the class, open to discussion, and receptive to exchanges of thoughts and ideas that could provide learning opportunities in the virtual environment. Much of the literature on social presence described it as something that is perceived (Richardson & Swan, 2003; Swan & Shih, 2005). Considering Kehrwald's (2008) definition of social presence as one's way of indicating not only his or her attendance in the class but also indicating the desire to be an interactive participant, one may see this particular definition of social presence as an important concept in an online course, especially with the discussion board postings.

In describing the community of inquiry, Garrison and his colleagues (2000) suggested that there are three important types of presence: cognitive, social, and teacher. Cognitive presence, meaning participants' recognition, exploration, understanding and perspective of a question, and social presence, meaning participants' emotional expressions, thought exchanges, and thought-sharing abilities, are student actions. The authors asserted that the teacher is a critical part of this model, and the teacher's presence must be in place in order for their model to be successful. Teacher presence is more than having a teacher acknowledge that he or she is a part of the course; this type of presence includes designing the course, establishing a positive environment, and facilitating discussions that encourage students to make meaning of the information provided. That is, the instructor facilitates the students explicitly filling in gaps in source materials such as assigned source texts and constructing understanding in the domain of the course that integrates the students' pre-existing frames of reference and the domain of the course.

Just as an instructor is responsible for designing and implementing the online course, instructors also need to develop ways to teach their students to use social presence cues so that all participants have the knowledge and ability to "stand up and be noticed" in the course (Kehrwald, 2008); ultimately, however, it is each student's choice as to whether he or she regenerates what has been learned. Kehrwald has pointed out that when students recognize that they need to interject or participate in a class and do not know how to do so, these students may become disappointed or frustrated with the class. It is at these times that students may have a miseducative experience like those that Dewey conceptualized.

As an extension of this dissertation research, one might implement another study on social presence cues in the online composition classroom, introducing social presence cues to both instructors and students, emphasizing the use of the cues in the course. This could readily be done in a 16-week course, but the introduction of and instruction on use the social presence cues would have to be immediate and intentional in a 10-week course. As I found in this study, it is difficult to coach and instruct participants on both the course material and on enacting a complex new behavior such as fostering social presence. A researcher implementing further study would have to develop ways to encourage participants in their use of social presence cues and redirect those who are not including them in exchanges. By providing a definition of social presence, explaining the possible significance of the use of social presence cues, and reinforcing the participants' use of these cues over a longer time than a 10-week course, the researcher might better determine the impact that the use of social presence cues may have on students' critical thinking and argumentation.

Implications for Online Composition Instructors' Development of Online Opportunities to Encourage Students' Critical Thinking

In their qualitative study on developing higher order thinking in online courses, McLoughlin and Luca (2000) proposed several instructor opportunities that may support students' critical thinking in an online environment. Instructors may have opportunities to stimulate students' critical thinking such as offering students thought-provoking questions, providing them with individual feedback when possible, and including communication tools that promote interaction and collaboration. The course design in this

study provided participants in both treatments with opportunities for higher-order thinking, interaction, and collaboration on the discussion board by answering questions and sharing with other participants in the course. The reading heuristics assigned to each genre of reading may have moved students who interacted online using these heuristics as a scaffold toward thinking more critically.

This study measured students' achievement scores (critical thinking) on the assigned discussion board postings and essays. Although the mean scores for the discussion board achievement scores did not increase, the essay achievement scores increased from the pretraining to the posttraining. That the students were graded on the quality of their argument on their essays but graded on good faith effort on their discussion board postings may help explain this result. Future researchers might design a course that provides formative and summative instruction on thinking critically and feedback that reinforces high-quality critical thinking on discussion boards. Instructors might, in addition, model their own subprocesses of argumentation early in the course and refer back to those subprocesses throughout the course.

Richard Paul (2005), a director at the Center for Critical Thinking, posited instructor misconceptions that should be addressed in future research on instructors developing opportunities to enhance students' critical thinking. Paul identified several instructor issues that should be studied. He explained that many instructors recognize the need to encourage students to think more critically, but they do not have the tools by which to make this deeper thinking happen. These instructors may have the information, but they have not been trained or taught how to use it. It is my experience as a supervisor of online instructors that many adjunct, and even some full-time, instructors have not

received necessary training on helping students develop stronger critical thinking skills. In their panel discussion of critical thinking in distance education and the traditional classroom, Visser, Visser, and Schlosser (2003) advocated for the importance of instructors having at least a basic understanding of critical thinking and being able to model it in their class instruction.

Paul (2004) stated that instructors cannot expect students to come into their classes prepared for critical thinking if they have not had previous classes that help the students build these skills. Paul also stated that it is unrealistic for an instructor to think that he or she can teach a student to think critically in one class. This would especially be true for online courses that last only 8–10 weeks.

All four of the instructors in this study suggested that the training should be implemented prior to the beginning of the term or course. Based on Paul's explanations, providing the training prior to the course would allow the instructor to start instructing the student on developing critical thinking skills from the beginning of the course. Just as with many of the composition instructors, Instructor 3 teaches preparatory English and both of the sequenced composition courses. Instructor 3 suggested that an introductory instruction on critical thinking should be implemented in the first of two sequenced composition courses in the setting for the study, ENG 1101, so that students already have a foundation for it when they reach ENG 1102.

Prior to future research in this area, future researchers may wish to develop a more extensive critical thinking and argumentation training, along with more intensive training in social presence cues, to be implemented prior to the terms that he or she is studying. Paul (2004) put forth that critical thinkers should have multiple specific

abilities. Critical thinkers, Paul stated, should be able to consider what they are thinking and the meaning that is being made, and in addition to their internal thought assessments and processes, they should also be able to process the thinking processes shared by other participants. So, just as the instructor should be trained to teach critical thinking to the students, they should be given the proper materials to teach the activity of adept critical thinking to students in their courses. More extensive training of instructors then could be carried out over the course of this study.

Implications for Instructors' Course Designs

Much of the literature on online learning suggested that instructors take a constructivist approach (Huang, 2002; Odin, 2002; Palloff & Pratt, 2007). That, motif in the online learning literature, along with the nature of an online course, is what led to the choice of constructivism as the theoretical framework for this study.

After designing and implementing the study and instructor training, I found that with the time constraints and course requirements of the university that was the setting for my study, I was unable to provide a purely constructivist course design. Because students were at a distance, in various time zones, and with the time in between assignments only being a few days, I found that there were times when the designed questions became quite directive. Although the course design did not meet a purely constructivist approach, it did meet the description of an online constructive environment in which participants interact with the knowledge provided in a learning environment, refer to prior educational and life experiences, and interact with participants in that environment. In this way of defining a constructivist environment drawn from the

distance education literature, instructors have been urged to act as facilitators, guiding students as they interact in these online learning environments so that students make new meaning in the domain of the online course and explore their thought processes for making meaning (Herring, 2004; Palloff & Pratt, 2007).

Although it would require extensive instructor training, instructors for 16 week, and possibly 8-10 week, courses might be taught to design an online course that is highly constructivist. Again, the instructors must receive instruction on both creating a highly constructivist online learning environment as well as implementing the course in a constructivist way. With the issues of distance, time constraints, and university requirements the extent an online freshman composition class can be purely constructivist may merit further study.

Implications for the Field of Online Composition

Until recently, it was hard to find empirical research about online composition instruction. There are several reasons the field of composition may be hesitant to move to a virtual world. For online composition instructors, instruction requires that most of the course be designed at the beginning of the term. Because an instructor cannot easily provide extra instructions or clarify questions, online instructors must provide very detailed course designs and assignments (Blair & Monske, 2003; Stine, 2004). Blair and Monske (2003) provided several other reasons why online English courses might not be embraced by faculty: extended contact hours, lack of compensation, and failure to acknowledge teaching online for tenure. In his study comparing the amount of time required by a face-to-face class and the same course online, Reinheimer (2005) found that

teaching composition online requires more time than teaching the same class in a face-to-face environment.

One contribution of this study is a design for supporting online freshman composition instructors. Key features of the study design are an adaptable course design, instructor training, and an interaction emphasis.

Course Design

The entire course is designed for the participating instructors. They are able to adapt the wording of elements such as announcements to sound more like their "voices." All discussion board questions, heuristic questions and essay questions are provided in the course design (Appendices B & M).

The design of the course includes one discussion board posting per week. Prior to their responses to the students' first discussion board postings, the participating instructors receive the five elements of constructive feedback that I developed for responding to the students' postings. This feedback is explained in the instructor training (Appendix G). By using these elements of feedback, instructors may be able to reinforce students' critical thinking and redirect areas where they may be confused or may not be moving toward a deeper thinking. When asked if she saw changes in her students' use of critical thinking after the training, Instructor 3 attributed the course design,

> *The reading, heuristics, discussion board, and essay begin setting a pattern for elevated thinking and analysis. Some had an extremely hard time with this as they have been taught to read, review, and recite back what they read. I feel the majority of students benefited from this session.*

During the training, instructors explore several items of the course design that are intended to serve as scaffolds for the students' learning. The heuristic questions that are assigned to the students after each reading assignment model possible types of questions that instructors might want to ask students. The heuristic also serves as a way for online instructors to encourage students to start thinking more deeply about the reading assignments. Other scaffolds that are discussed in the instructor training are implemented in the third segment (posttraining) of the study. The Guide to Rating Critical and Integrative Thinking (GRCIT) is designed to be used as a guide to students for writing the essays and to the instructors for grading the essays (Appendix J) The instructors also receive three sample essays graded using the GRCIT (based on a score of 1-3) and marked with comments demonstrating the use of the items identified on the scoring guide. During the training an instructor assignment is to grade an unmarked copy of the three essays and compare those to the labeled essays. The course design calls for the instructors to provide the students with a copy of the sample essays with the marked items. The students may use these samples a scaffold to help develop a better understanding of the moves they should make in writing the essay. A final scaffold is a student peer review activity in which students exchange papers and provide feedback to their review partner (Appendix N). The peer review is designed to give students experience in both peer editing and providing constructive feedback.

Instructor Training

The training has been developed in a way that both treatment groups receive pertinent information and training. With the exception of a few abbreviated assignments, the only variation in the situational treatment is the training on social presence cues. As

training for all freshman composition courses, instructors would receive the situational treatment training in order to incorporate the social presence cues. Because social presence cues have been operationalized, instructors are provided with eight social presence cues in and encouraged to use them in their interactions with students (Appendix K).

The training consists of six critical thinking sessions and an additional social presence session. These sessions discuss various pertinent topics (i.e., critical thinking, critical reading, developing questions). This study provides participating instructors with literary based information that has been researched and synthesized. The instructors are given two options for receiving the information. In addition to providing a Power Point presentation of this information and incorporating my voice through the Wimba software, the instructors receive a written script of each session to have as a future reference.

The training provides the instructors opportunities to participate in the same types of activities which are assigned to their students. Instructors in the training are encouraged to share their thoughts and answers with their training partner. In situations such as with Instructor 1's lack of participation in the cognitive training of this study, the trainer may have to become a participant to make sure that those being trained receive the experience of interacting on the discussion board, receiving and giving feedback, and revisiting prior activities with new insight.

As previously mentioned, instructors receive directions for implementation and elements of the course such as the five elements of constructive feedback, a literary based document. The instructors are required to use the elements of the constructive feedback for responding to students' discussion board postings prior to the training. After receiving

training, which includes a discussion about constructive feedback, the instructors are required to use the five elements on the students' posttraining discussion board postings. When asked to discuss one valuable understanding she had after the training, Instructor 2 stated,

> *I really did find that MY attention to feedback on the discussion board had a direct effect on my students' critical thinking. A little bit of time on my part had a HUGE impact on the tone and direction of the discussions.*

Because the instructors are to have experiences similar to those of their students, the instructors participate in the designed scaffolds during the training. The instructors post and discuss various thoughts and ideas on the discussion board, answer and design heuristic questions and use the sample essays in order to gain better understanding of grading and modeling for the students. During the training the instructors receive the GRCIT scoring guide. They familiarize themselves with the scoring guide and discuss it with their training partners, considering the best possible ways to use it for the upcoming essays.

Interaction

As seen in the two previous features, this study provides several opportunities for participants to interact. The discussion board is an area of the course that may promote participant interaction. In this course design instructors are required to provide constructive feedback, to interact with students through the discussion board assignments, and to incorporate students' discussion board participation as a part of their grading and course requirements. At this particular university, instructors are required to create a student discussion board forum that provides a space where students can interact outside

of the assigned postings; the instructors are also expected to create a discussion board forum through which the student may communicate with the instructor and post questions about the course. When asked the aspect of the study that she found to be of value, Instructor 3 replied,

> *The discussion board participations were the most valuable to me. I use discussion boards throughout the course; however, not in the depth that was used in this study. I think the questions, that are geared toward critical analysis, opened up a new way of thinking for the students and better prepared them to write their essay. The discussion board also allowed students to feed their thoughts to others and have others comment on their evaluation.*

One important aspect of this study, focusing on the training, is that it provides online freshman composition instructors an opportunity to interact with one another. In this particular study, the two situational treatment instructors completed the assignments that required interaction on the discussion board, and once the two seemed to be more comfortable with each other, I noticed that there assigned interactions began to lead to conversations about other situations, exchanges of information, and the offering of advice and suggestions. This aspect of the training could be quite valuable for online universities that have virtual instructors living in countries around the world.

When asked what she believed to be most valuable about the training, Instructor 4 explained,

> *The exchange with other faculty was valuable because we approached similar situations differently and that gave us new perspective.*

Another important aspect of this study is that, implemented as designed, this course provides opportunities for students to interact with each other and possibly develop a sense of a community in the course. Through this interaction students may explain their thoughts on a topic, share personal or educational previous experiences, and provide feedback and further suggestions to their peers, possibly encouraging their peers to think deeper about the issue. There are several other possible online areas that may be incorporated into the course design to encourage interaction. Blackboard offers chatroom areas, virtual classrooms, and, if purchased by the university, Wimba or other interactive software may be used for instructors to host synchronous lectures, virtual office hours, or student advisement. Instructor 4 mentioned Blackboard when discussing participant interaction,

> *I think the discussion board function of Blackboard is a great tool because the students usually enjoy exchanging information with others. The discussion board assignments worked well and provided increased interaction.*

At the end of the term of this study, Instructor 2 asked her students to complete an unofficial survey about the course design. The comments below are from several students who participated in the study. These comments demonstrate the students' recognition of the instructor's interactions with the class on the discussion board, and several of the students recognize a move they made toward deeper thinking during the course. (See Appendix U for additional students' comments.)

Student 37

The Instructor was great not just because she did a great job at teaching, but just because she was a real person that showed compassion and concern for each student individually.

Student 35

I thought that this course was very helpful and I actually improved on my writing. I always kind of enjoyed English, and even though I was stumped sometimes, I think I really enjoyed the actual learning how to write the right way. The hardest part to the class had to be not just writing an essay about a play, but actually thinking before I just typed something. ☺ I realized early on that just typing something would not get me very far.

Student 32

I learned to look at symbolism a bit deeper than before. I would normally read and see what was on the surface, but now I feel I'm walking away with a better sense of digging deeper as to what the author was trying to relay to his/her audience. I enjoyed reading the different views on the discussion boards and appreciated the feedback I received regarding my posts. My classmates were respectful and very insightful. I am pleasantly surprised that I learned so much from an online course. Usually, in class interaction helps me retain more knowledge, but I feel as though I'm walking away with a greater understanding of literature than when I started this course.

Student 22

I think I did learn to think in more critical ways. I think the reason for this was because we had to analyze most of the things that we read. My favorite discussion board was the mourning of the dying American females names. I thought it was very thought provoking. I love reading and analyzing things that I can immediately identify with. I enjoyed reading everyone else's thoughts about the discussion board topics. My classmates often made points or had ideas that I hadn't thought of.

Student 40

Throughout this class I definitely had to learn to put my thinking cap on, because I had to think in many ways I had never had to do before. I loved getting feedback from all of my classmates, as it helped the learning experience to be about ten times easier because I got to learn of others thoughts and experiences with the stories. My classmates all seemed to be really amazing, at least the ones that I really got to work with!

The comments above allow the reader a glimpse of the students' insights on the course design used in this study. By developing a more student-centered environment for the course design of the online freshman composition, I desired to create an online learning environment in which students may learn both individually and collaboratively (Savenye, Olina, & Niemczyk, 2001). Stine (2004) suggested that composition courses, when designed to do so, allow students the opportunity to exchange their thoughts and ideas with other participants and also provides a medium by which students can think critically and reflect prior to publicly submitting their thoughts.

Future Research on Social Presence and Development

Three opportunities for future research are suggested by the results of this study. The most apparent research possibility is revising this study, training, course design and implementing after revisions. A second opportunity for future research is to follow the instructors who participate in the kind of training in this study for a 10-week term in their own courses, which they design and teach, to investigate if they continue to implement assignments that encourage students' critical thinking to develop written arguments. A researcher could again quantify the use of social presence cues to determine if the situational instructors continued using the cues in their own courses significantly more than comparison instructors who have not experienced social presence training. A third opportunity for further research is to focus on the discussion board achievement scores (critical thinking) to determine why they unexpectedly decreased in the posttraining postings. Could the decline in students' instances of critical thinking be due to the less formal nature of the discussion board, including the absence of formative and/or summative feedback, or might students have the perception that articulated critical thinking does not belong in the casual postings on the discussion board?
Instructor 2 collected comments which echo the existing survey research on students' satisfaction.

Prior to receiving the feedback from her students, Instructor 2 explained her thoughts on the discussion board and students' satisfaction in her interview. Instructor 2's and her students' comments echo the existing survey research on students satisfaction.

> *I really believe this interaction on the discussion board is going to result in happier students who feel they had a more "real" experience than usual in an*

online course. This added an element of community that most discussion boards don't.

Much of the empirical research on social presence measures students' *perceptions* of satisfaction and learning (Howland & Moore, 2002; Richard & Swan, 2003; Swan, 2001). Swan and Shih's (2005) mixed methods study measured for the same perceptions as previous studies, and the study also reported qualitative results that discussed the students' perceptions of the instructors' social presence in online courses. There are many more studies that measure the students' perceptions than those that operationalize social presence. Few empirical studies of social presence conceptualize the concept as an action (Rourke et al., 1999; Wise et al., 2004).

Unanswered issues raised in these data involve teasing apart the effects of teachers' social presence cues per se, students' social presence cues that are responses back to the teacher in an environment where all students have access, and students' social presence cues directed to other students. As research proceeds on relationships between awareness and training to use social presence cues, it may be important to differentiate according to who is generating the cues and who is receiving them. It is important during this world-wide transformation in freshman composition teaching that research on social presence move beyond indicators of satisfaction and to direct measures of the complex range of social presence activity online.

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FOOTNOTES

[1] The report does not characterize the total population of the 1992 assessment. It does, however, note that the representative sample for the 2003 assessment included 19,714 adults, ages 16 and older in both in households and in prison. A table provided in the report records the percentages of the U.S. adult population in terms of educational attainment of adults according to educational levels in both 1992 and 2003. It states that the percentage of the U.S. population that were college graduates in 1992 was 10 percent, and the percentage that of college graduates in 2003 was 12 percent. There is no discussion of how the larger percent of U.S. adults holding college degrees in 2003 compared to 1992 may relate to 2003 compared to 1992 adult college graduate performance on measures of adult prose literacy.

[2] Although the National Assessment of Adult Literacy (NAAL) characterizes some of the attributes of the sample of college graduates used for the 2003 assessment (n = 19,715) of adults who are considered 16 and older, there are no references or specifications given provided about the qualification or population of the sample of college graduates assessed in the 1992 study nor does the report mention the total number of college students surveyed in either the 1992 or 2003 assessments.

[3] There is little empirical research based on online composition courses. Most articles on composition that refer to technology address use of electronic technology in a

face-to-face classroom. There are composition articles that discuss online instruction; however, this number is limited.

[4] Much of the literature on social presence and the level of student satisfaction and participation suggest that perceived social presence predicts both the level of both student satisfaction and participation and student satisfaction. It should be noted, however, that the directionality could be in the opposite direction. Students' level of participation and level of satisfaction during the course may predict the incidence of social presence cues they exhibit. Perceived level of student satisfaction and participation could also predict the amount of social presence exhibited in a course.

All students in eArmy courses are active duty military personnel. Students in the eCampus courses may be either military or civilian.

[6]Because Instructor 3 was unaware that I was measuring for social presence cues, I would explain the increase in her incidences of social presence cues usage to her time availability. It is possible that Instructor 3 was under time constraints from her full-time job, and that limited her participation on the discussion board. Instructor 3 taught a group of eArmy students. Another possible reason for the increase in social presence cues usage is that Instructor 3 sensed that these students, who are accustomed to nondisclosure, may have become more receptive to personal interaction.

[7] Because the sample is smaller in the cognitive treatment than in the situational treatment (Chapter 4), the two treatments should not be compared to each other as equivalent.

APPENDICES

APPENDIX A

INITIAL TELEPHONE INTERVIEW FOR PARTICIPATING INSTRUCTORS

INITIAL TELEPHONE INTERVIEW FOR PARTICIPATING INSTRUCTORS

Initial Telephone Interview for Participating Instructors

1. How long have you been teaching English composition online?

2. Please list three differences you recognize between teaching composition in the face-to-face classroom and online.

3. How do you define critical thinking?

4. How do you define an argument?

5. Do you believe that students naturally think critically when writing? Why or why not?

6. Do you have ways in which you encourage students to think critically in your course? Please explain.

7. Do you use the discussion board in your course? If so, how does it work for you (good and bad)? If you do not use it, please explain why.

8. Is there a difference between students' writing for the discussion board and writing for an essay?

9. Would you say that your personality "shows" in your online course? Explain.

10. What is at least one thing that you would change about your students' writing (as a whole)? Please explain.

APPENDIX B

WEEKS 1–2 ASSIGNMENTS

WEEKS 1–2 ASSIGNMENTS

Weeks 1 and 2 assignments

Short story reading assignment

Students should be required to read the following stories:

- "A & P" (p. 16)
- "The Story of an Hour" (p. 215)
- "The Things They Carried" (p. 265)

Discussion board guidelines

- Students' initial posting should be no fewer than 300 words.
- Students should be respectful of others and differences in opinion.
- Students should not say anything that might be taken in a negative way.
- Students should edit their discussion board postings prior to submission.
- Students should provide constructive (positive and helpful) feedback to group mates.

Week 1 discussion board question

Explain why you believe that a character in your favorite assigned reading acted the way he or she did. Make sure you can support your explanation.

Week 2 discussion board question

Discuss how the author's craft in one of the stories you read affected your understanding of the story. What literary devices did the author use to craft the story? How did these devices influence your ability to construct meaning? Use evidence from the text to support your thoughts.

Short Story Question Heuristic

Answer each of the following questions in detail. Support your answers. You will use these questions for all three short stories.

1. What were your first impressions of the story when you looked at it?
2. How would you describe the vocabulary the author uses?
3. List three significant events in the story.
4. What would you say is the theme of the story?
5. What point of view does the author use in the story? How do you think this point of view affects the reading of the story? How might the story be different if it were written in another point of view?
6. What was the setting of the story? Do you think the setting impacted your ability to construct an understanding of the story? If the setting were different, would it change the story? Why or why not?
7. Discuss one other literary device that you found the author used to craft the story. Why do you think the author chose to use this device? How did it impact the story?
8. Share one way you "connected" with the story. Did it remind you of a past experience, friend, situation? If you do not feel that you connected with the story, please consider and share the reason(s) you may not have made a connection.
9. Imagine that you are a new writer, and you have been given the task of writing the sequel to the short story you read. Describe what you might say happened in your sequel. Why do you think that this would have been the next outcome?
10. Who would you say was the author's intended audience? Why do you think that he or she wrote this for that particular audience? Why is aiming at the audience important?

Essay guidelines

- The essay should be no fewer than 800 words.
- The essay should include citations from the text.
- The essay should include both inner citations and a works cited page in MLA format.
- Students should make sure that they answer the entire question and support their answers.

Essay 1 assignment

Select one of the three stories that you read last week. How does the main character in the stories' actions reveal his or her character? In what ways do his or her thoughts and/or actions often oppose each other?

APPENDIX C

POWERPOINT FOR COGNITIVE AND SITUATIONAL TREATMENTS

PowerPoint for Cognitive and Situational Treatments

Thank you for choosing to participate in this study. I hope that it will provide you with opportunities to learn more about teaching critical thinking skills in an online English composition course. In this study I am testing two approaches to teaching critical thinking and argument development, both of which are supported by current research—and that modifications may need to be made across both of the groups of participating instructors.

The study will be set up in three segments: pretraining, training, and posttraining. I know that the training session will be intense, but I did take into account that you are all teaching a course in addition to participating in the study. I even worked in a few days off.

We will get to know each other better as the term goes along, but just in case anyone has any questions, all of the instructors participating in the study are Troy ENG 1102 instructors.

As I said earlier, the two week training session will be loaded with a lot of valuable information and activities; however, I hope to help you find successful ways to encourage your students to think critically on the discussion board. I am interested to see if by developing an environment in which students think critically when answering questions on the discussion board, the students also demonstrate more signs of critical thinking and argument development in their assigned essays. The training will provide you with ways to promote critical thinking and argument development in your course.

You will be in a group with another instructor. You will interact with this instructor when we discuss concepts and issues.

Discussion board (db) #1 will allow you the opportunity to get to know your "classmate." Also, I want you to consider what you think the five most important guidelines for posting and participating on the discussion board should be. Post this on db#1 as well. I want to allow you all to have input in the guidelines we use.

APPENDIX D

CRITICAL THINKING, READING, AND ARGUMENT DEVEVELOPMENT

Session— Critical thinking, reading, and argument development

Today's session will discuss three key terms that we, as composition teachers, need to understand and be able to explain to students. These terms, critical thinking, critical reading, and argument development, are words for which we *know* the definitions, but we might not be able to explain them to our students.

Critical thinking (slides)

Scriven and Paul (n.d.), members of The Foundation for Critical Thinking, define critical thinking as "the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action." That is not an easy definition to explain to students, so we will now look at a few definitions that might be easier for our students to understand.

Troyka and Hesse (2005), textbook writers, suggest that critical thinking could be a mental process in which students recognize a problem, examine possibilities, make an educated guess, collect evidence, and provide an educated conclusion based on the findings.

In their training article, Jones and Safrit (2004) suggest that critical thinking can be an internal action of challenging oneself by analyzing one's own thoughts and those of others and recognizing a variety of solutions to the problem at hand.

Online learning researchers Garrison, Anderson, and Archer (2000) suggest that critical thinking may be actions that are taken to arrive at an answer, but they also

propose that critical thinking may also be described as the outcome or the final product of an activity.

Take a moment to write your own definition of critical thinking that you could share with your students.

Critical reading (slides)

A second term is *critical reading*. Some composition textbooks use the term critical reading when discussing the process in which a student should read material provided (Reid, 2006; Troyka & Hesse, 2005). Simply defined, Troyka and Hesse (2005) suggest that critical reading is thinking about that which one is reading during the process. The authors also discuss the importance of students understanding that reading is an active process, and their goal should be to make meaning of the information they are reading. (We will discuss a bit more about making meaning with the text in the next session.) Reid (2006) characterizes active reading as reading about a text and discussing ideas in small groups. Reid addresses the online instructors as he suggests that critical reading often involves email exchanges and discussion board postings.

Students may learn to read more critically if they ask themselves questions as they read (Reid, 2006; Troyka & Hesse, 2005). The students should ask questions that are relevant to the type of writing that they are reading. If a student is reading a journal article in a pursuit of collecting evidence, his or her questions should relate to the credibility of that evidence (Troyka & Hesse, 2005). If students are reading a literary work, Reid (2006) suggests that they should develop and ask questions about the author's craft, intentions, and outcomes of the piece as they read. Troyka and Hesse (2005)

recognize students' understanding of critical reading as the pathway to becoming critical thinkers.

Stop for a minute and consider (write down if you'd like) whether you believe that critical thinking and critical reading influence a student's argument development. If they do, in what ways?

Argument (slides)

From Dewey's (1933) model of the phases of problem solving until today, educators are striving to help students develop high-quality arguments in all writing but especially in the writing for college composition courses. It is interesting that some authors provide a general definition of an argument such as that an argument is the writer's way of convincing the reader to agree with him or her on a controversial topic (Kirszner & Mandell, 2004; Lunsford & Ruszkiewicz, 2007; Troyka & Hesse, 2005; VanderMey et al., 2004). Troyka and Hesse (2005) suggest that the argument is the way a writer can demonstrate signs of critical thinking in academic writing. However, this definition of argument does not sound like one that promotes use of critical thinking.

Other authors provide a more detailed definition of an argument as being an organized and logical progression, supporting a certain stance on a debatable issue through the collection of evidence and use of reason (Reid, 2006; Seyler, 2008).

Garrison's research group (2000) views critical thinking as both an outcome and a process. Through my research on critical thinking and argument development, I now recognize that critical thinking can be characterized as one of the key subprocesses in argument development.

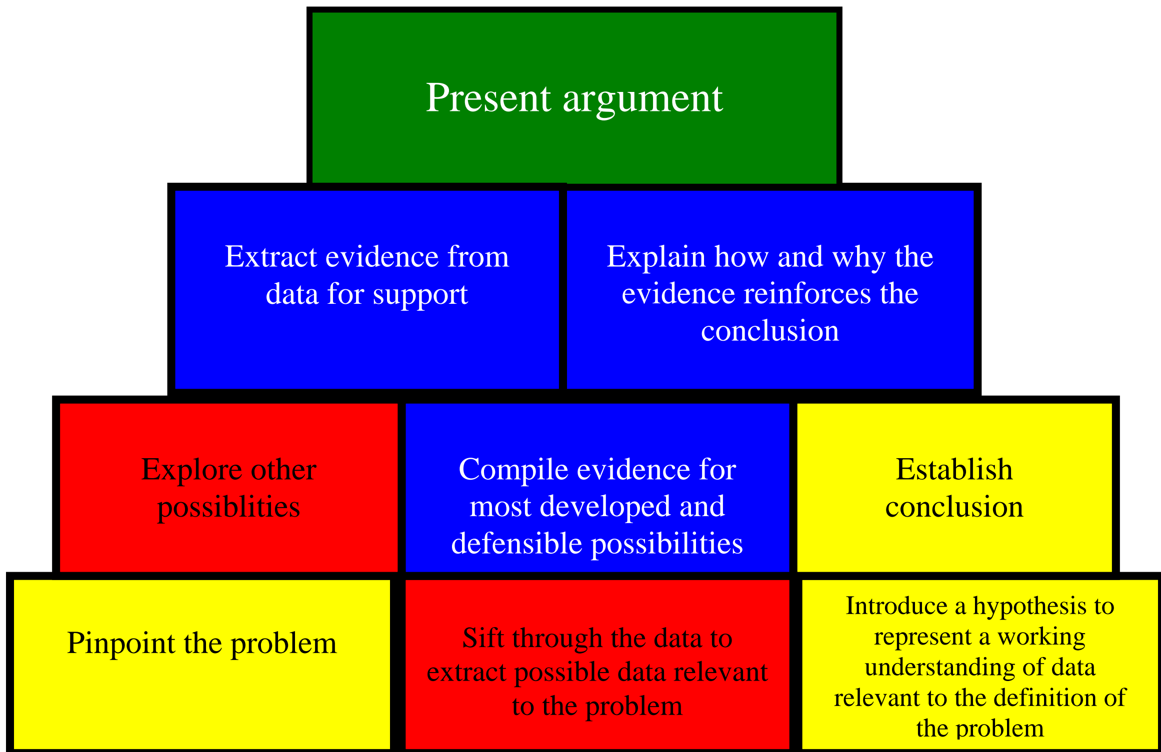
As I said earlier, beginning with Dewey (1933) many educators and researchers have developed their own models of problem solving or critical thinking. Basing my own model on the work of research in both face-to-face courses and online learning environments, I have constructed the eight subprocesses of argument development (Hillocks, 2002; Garrison, Anderson, & Archer, 2000; Toulmin, 1958).

Subprocesses	Subprocesses of Argument Development
Subprocesses 1	Pinpoint the problem
Subprocesses 2	Sift through the data to extract possible data relevant to the problem
Subprocesses 3	Introduce a hypothesis to represent working understanding of data relevant to the definition of the problem
Subprocesses 4	Explore other possibilities, searching for both confirmation and disconfirmation of hypothesis
Subprocesses 5	Compile evidence for consideration of most developed and defensible possibilities
Subprocesses 6	Establish a conclusion
Subprocesses 7	Extract evidence from data collection to uphold conclusion
Subprocesses 8	Explain how and why the evidence reinforces the conclusion

Figure 2. The subprocesses which may be used in developing an argument (Hillocks, 2002; Garrison, Anderson, & Archer, 2000; Toulmin, 1958).

Just as with Dewey's (1933) problem solving model, the students do not have to complete all of the subprocesses nor do they have to work through them in a sequential order. Students may make moves throughout the eight subprocesses, even revisiting some of them several times.

Just like with any structure, one must have a strong foundation in argument development. Therefore, my subprocesses start on the bottom row and build up until the student constructs and presents an argument.



It may be interesting to view the subprocesses in one more way, in categories.

Decision points	Explorations of decisions	Collections for support
		Compile evidence for consideration of most developed and defensible possibilities
Pinpoint the problem		
	Sift through possible data to extract possible data relevant to the problem	
Introduce hypothesis to represent working understanding of data relevant to the definition of the problem		Extract evidence from data collection to uphold conclusion
	Explore other possibilities, searching for both confirmation and disconfirmation of hypothesis	
Establish a conclusion		Explain how and why the evidence reinforces the conclusion

Regardless of the way in which the subprocesses are presented, it is evident that these subprocesses, most of which demonstrate signs of critical thinking, are significant in argument development.

APPENDIX E

ENGAGED READERS

Session—Engaged readers

A historical view of engagement

Dewey (1933) discussed the importance of students using reflective thinking as they try to engage in learning. He defined reflective thought as, “Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further conclusions to which it tends (p. 9).” In order for a student to become engaged in learning, an instructor must not settle for the surface answer. The instructor should encourage the student to seek evidence to support the given problem, consider other possibilities, and again seek evidence to prove or disprove these new ideas. It is through this process that students may become engaged in learning (Dewey, 1933).

Defining engaged readers

Referring to Dewey’s thoughts on reflective thinking, Mosenthal (1999) states that a student’s point of engagement is often when he or she begins to use thoughts and ideas to solve problems. Also referring to Dewey’s thoughts on problem solving and knowledge construction, Guthrie and Anderson (1999) discuss students’ reading engagement. The authors stress that reading is often related to social interaction. Guthrie and Anderson explain that when a student reads in order to interact socially, to curb curiosity, or to have a more pleasing experience with the text, the student is more likely to be an engaged or active reader.

Educators Guthrie and Anderson (1999) characterize engaged reading as a means by which students build on prior knowledge by using cognitive strategies in order to fulfill the reasons for reading and to be socially active in society. The authors also

propose that reading is often a constructive process. They, like Dewey, maintain that students, in this case readers, use their past experiences and prior knowledge in their reading to attain new understandings and gain more knowledge. In order to become engaged readers, students must construct or build new meanings and gain an understanding of an author's craft or use of literary devices.

Guthrie and Anderson (1999) recognize that expert readers use strategies in order to more easily engage in the reading, thereby constructing new understandings. The authors list several of the strategies. Recalling prior understandings and seeking new knowledge are two strategies that readers might use. Using techniques such as questioning or inferencing, using context clues, or predicting are other strategies that readers might use. Guthrie and Anderson (1999) remark that experienced readers often use these and other strategies without realizing that they are doing so; however, when reading gets more difficult to understand, readers need to be able to recognize the proper strategies to use in order to more easily engage in the reading.

Other names for engaged readers

In *Romeo and Juliet*, the lovesick young female proclaims that a rose by any other name would smell the same (my paraphrase). As we look at three prominent practitioners in the field of reading, we will find that there are several names that all relate to what we are calling *engaged reading*.

Rosenblatt (slides)

Engagement, or a reader's construction of meaning in a text, is often a word with many faces. Rosenblatt (2005) refers to the reader's experience with a text as having a *transaction*. Rosenblatt references Dewey when using this term, emphasizing a two-way

process between the reader and the text. Rosenblatt suggests that a reader's experience is cyclical. The reader sees symbols on a page, transacts with them, creates meaning, relates new meaning to their own lives, and then starts the process over again. Each time, the reader constructs new knowledge based on what he or she has previously attained.

Rosenblatt also discusses *living through* experiences when readers recognize intrinsic expressions such as developing emotions, encountering frustrations, and creating mental pictures. These expressions are part of what is *evoked* during the reading; it is during the evocation that the reader should reflect on response to the text. Rosenblatt (2005) suggests that the reader should use self-reflection of their thoughts and comparison to others' thoughts to determine if their evocation is well founded. It is through these evaluations that the reader not only learns about the literature, but the reader also learns more about himself or herself.

Wilhelm (slides)

Wilhelm (1997) recognizes the reader's experience with the text as *engagement*. Similar to Guthrie and Anderson, Wilhelm characterizes engagement as occasions when the reader makes moves and uses strategies to enter a secondary world of meaning, which is a definition that is in alignment with that of Rosenblatt (2005) and Guthrie and Anderson (1999). Referencing the work of Rosenblatt, Wilhelm suggests that a reader's engagement, personal experiences and evocations with a text, are essential to allow the reader to enter what Wilhelm calls *story worlds*, or literary worlds created by the reader.

Langer (slides)

Langer (1995) refers to the reader's experience with the text as *envisionment*. Just as Wilhelm suggests that there is a secondary world for successful readers, Langer

characterizes this world as a text world. Envisionment is the world in which a reader experiences at any given time during reading. A reader's envisionment relates to the reader's experiences, understandings, feelings, and questions that arise as he or she reads a text. Because envisionments are understandings at which the reader arrives at various occasions in the reading, they are always changing. As a reader constructs new meaning from the reading, his or her experiences with the text change also.

Take a moment and consider (write if you would like) the reasons it might be beneficial for students to become engaged readers.

Why do instructors want students to become engaged readers?

The most obvious reason that we, as instructors, would want our students to become engaged readers is because it helps them enjoy the reading. Students are able to construct new meaning about the text when they are engaged in the reading. They also construct a better understanding of themselves. Because this process is like road work—ALWAYS under construction—an engaged reader should always be constructing new understanding about the text and himself.

Although much of reader engagement depends on the individual reader, there are several ways that instructors may help encourage engaged reading. Instructors can make students aware of the need to use reading strategies, introduce the strategies to them, and then help students practice using the strategies in their reading (Guthrie & Anderson, 1999). Rosenblatt (2005), Wilhelm (1997), and Langer (2005) all mention the importance of successful readers recognizing a sense of empowerment.

Rosenblatt (2005) acknowledges that many students read to gain new knowledge for a test or assignment; however, there are other students who read to experience what

Rosenblatt calls *living through* a text. Instructors can encourage students to try to do more than just read a text; they can invite the students to become a part of the text. It is at this point, when students *live through* the text that they often learn more about themselves. The instructors may invite the readers to record their personal responses, reflect on those responses, analyze their reflections, and relate them to their prior experiences. This should enable students to learn more about the text and themselves as the readers. Rosenblatt (2005) refers to the need for a reader to draw from his or her linguistic-experiential reservoir which reflects the reader's cultural, social, and personal experiences.

Wilhelm (1997) suggests that a reader's confidence with his or her reading may bring forth a sense of empowerment. He suggests that instructors must be willing to try different ways of teaching reading, and even literature, in order to help students become more successful readers. He proposes that instructors must be willing to select pieces and genres that might not be in agreement with a traditional canon. It is by selecting readings that apply more to personal and pertinent experiences that students may transact with the text. Wilhelm recommends several activities that were successful for him such as writing literary letters to explain reading personal reading experiences, free responses, two-column responses, and a unique incorporation of artwork and drama as a way for readers to have an active experience with a text.

Langer (1995) acknowledges the importance of reader empowerment. She also suggests that one way readers are empowered is through using some of the critical thinking skills we have been discussing to learn more about the text, themselves, and the world. Instructors can find ways to prompt students to use these skills. Langer also states

that readers are often empowered when they have developed a strong understanding of the text, and they are able to distance themselves from the text to observe characteristics of the text such as structure, significance, author's connections, and authors' crafts rather than just relying on their feelings and understanding alone to make meaning. Instructors should determine ways to boost their students' confidence and guide them to move toward this more elaborate way of constructing and understanding of the text.

I want to encourage you to actively engage in the short story reading so that you may have a lived through experience with the text.

APPENDIX F

QUESTIONING

Session—Questioning

Guthrie and Anderson (1999) recommend that instructors use questions to foster students' meaning making while they are reading. They also recommend that instructors teach their students to ask questions as they are reading to further their comprehension of the text. As online instructors, it is difficult for us to *ask* our students questions as they are reading in order to determine if students comprehend the text. So, one option that we have is to create a heuristic (Yeh, 1998) that could scaffold the students' use of critical thinking skills to enhance meaning making and comprehension of the text.

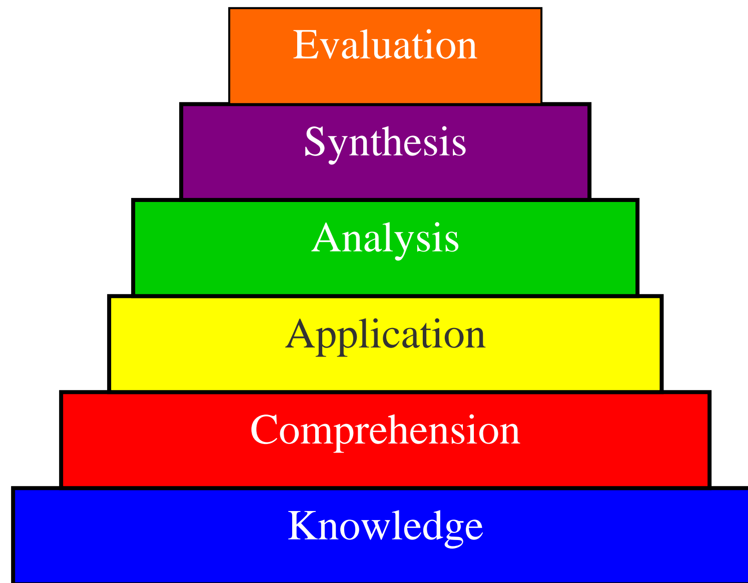
There are a few different types of questions that one might want to use when developing a reading question heuristic. Ponsot and Deen (1982) suggest first asking the readers to observe the text itself. Through making observations about characteristics such as the writer's vocabulary, punctuation, dialogue, and analysis of the author's craft, the reader should also build confidence in his or her ability to work with the text. One difference between the student's use of observations and his or her analysis of a text is that the listed observations are apparent to everyone. The reader need only make mention of them. The ideas that he or she will share in later questions in the heuristic will require more detailed explanation (Ponsot & Deen, 1982).

In their text on personal and academic inquiry, Ballenger and Payne (2006) recommend that students ask inquiry questions about a text as they read. Patterns similar to these questions might be incorporated into a reading question heuristic. The authors provide four categories of questions that readers and writers should consider as they read a text. Ballenger and Payne's (2006) four categories of questions are exploring, explaining, evaluating, and reflecting. As students *explore* a text, they should consider

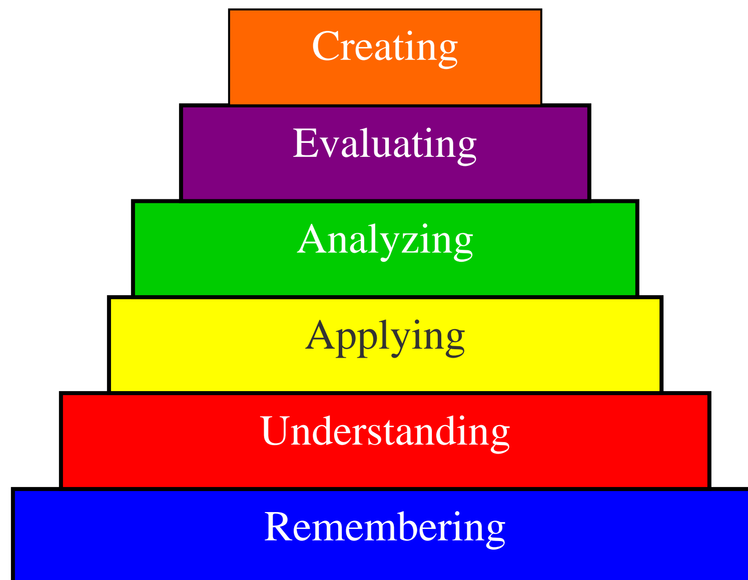
what gets their attention in the text, ask if these areas that gain their attention bring other questions to mind, and contemplate how and if their own prior experiences and knowledge affect their reading of the text. When students attempt to *explain* a text, they should question how the parts of the story work together to form a whole, determine what the story says to them, and compare it to other texts that they have previously read.

While students seek to *evaluate* the text, they should consider what they believe is credible in the text (and what may not be credible), search for evidence that supports or contradicts what the reader believes, select what they recognize as the main argument of the text, and reflect on their thoughts about the argument. As the students continue to *reflect* on the text, they should review their own actions in the reading (or writing) process. They should reflect on their own responses, consider how they might approach this differently, rate their performances in reading the text, and contemplate on how to complete the task differently in the future.

In her introductory college English class, Remler (2002) promotes the usage of *Bloom's Taxonomy* in creating questions. She requires that her students create their own discussion board questions, and she requires that their critical thinking questions be above the knowledge level. Remler also recommends that instructors use *Bloom's Taxonomy* in order to develop questions for class and tasks that prompt students to demonstrate signs of critical thinking when providing answers. In the 1990s one of Bloom's former students, and a group of cognitive psychologists, decided to update the terminology in Bloom's Taxonomy to better accommodate today's world.
Bloom's version of the classifications of higher order learning is seen in the graphic below (Bloom, 1956).



The revised version of Bloom's Taxonomy reflects changes in terminology since first developed by Bloom may be viewed below (Anderson, Krathwohl, Airasian, Cruikshank, Mayer, Pintrich, Raths, & Wittrock, 2000).



As we look at this revised version of the taxonomy, the same apprehension probably feels our minds as when we used the original one. How do I make questions using this model? A few suggestions are listed below (Anderson et al., 2000; Pohl, 2000).

Level of behavior	Possible question starters
Remembering	What happened to….? Which character….? Where was….? Which is correct…?
Understanding	What was the theme? How do you explain…? If there was another chapter…? Why do you think?
Applying	How did the setting….? What lessons did….? What effect did ___ have on ___? What was the main idea?
Analyzing	What were other possible outcomes of…? Compare ____ and _____. What if ___ had ___? What characters affected the outcome?
Evaluating	How do you feel about….? Who caused…..? Can you explain….? How would you….?
Creating	If you had been in that situation….? Can you see a better solution than….? Which character could have….? How would you….?

Consider your favorite short story, and take a few minutes to develop a few higher-order thinking questions that might relate to the story.

APPENDIX G

ENCOURAGING SIGNS OF CRITICAL THINKING AND ARGUMENT DEVELOPMENT ON THE DISCUSSION BOARD

Session—Encouraging signs of critical thinking and argument development on the discussion board

Using the discussion board (slides)

The discussion board is one of the most critical areas of an online course (Misanchuk, Anderson, Craner, Eddy & Smith, 2000; Palloff & Pratt, 2007). It provides a way in which students can thoughtfully communicate their thoughts and feelings about issues posted. The discussion board provides a record of these postings, enabling students to later return and question their own and others' thoughts (Hara, Bonk, & Angeli, 1998; Swan & Shih, 2005). The discussion board provides a means by which participants can establish a sense of presence in a course (Misanchuk et al., 2000; Palloff & Pratt, 2007).

However, in their qualitative study of students' experiences and perceptions in online courses, Howland and Moore (2002) acknowledge that the discussion board is not always successful in promoting a positive environment. According to their findings, several students were offended by postings that were required as participation but did not enhance their learning, and they were equally frustrated with students who posted just for the grade rather than to provide critical thoughts that might enrich their learning. It is imperative that instructors develop high-quality, relevant, and thought provoking questions for the discussion board (Howland & Moore, 2002; Rovai, 2000).

Researcher and practicioner Ovando (1992) characterizes constructive feedback by describing eight qualities of this form of response (p. 5). These eight qualities can be combined into three categories. Constructive feedback may be described as being pertinent, individualized, and motivational. I have developed five elements of constructive feedback that may encourage students to display more signs of critical

thinking and subprocesses of argument development on the discussion board. Here is the example I designed for the short story unit.

1. Read the posting at least twice to gain an understanding of what the student is trying to say.
2. While reading, the instructor should seek to find something in which he or she might provide a positive response to the student. An example might be, "You provided a new insight that I have never considered in your discussion of the story."
3. If there are points where an instructor questions something a student writes, he or she should mention that after the positive statement, being careful to not be overly critical of the response. An example might be, "I think that you have provided great insight in this situation, but maybe you could try to revisit the text, looking for examples of irony in the story. Then, post a reply letting us know what you find."
4. The instructor should then provide a comment that either encourages the student to think in more detail about the initial response or turns the student toward a new thought. The instructor might also ask the student questions that encourage students to find evidence to support their answers. An example might be, "You make mention of how the ending of "Desiree's Baby" is not what you expected. Irony is one way literature readers and writers talk about what is surprising in the story. Can you make any interesting connections between the idea of "irony" and your experience being surprised at the end of "Desiree's Baby?"

5. Instructors might choose to ask the students to provide a way in which they connected with the story or a character in the story, encouraging the students to share life experiences applicable to their readings. An example might be, “Were you able to connect with any of the characters in “Desiree’s Baby?” How do you think it might feel to be wrongly accused of something and then in the end be exonerated?

Encouraging Critical thinking and argument development on the discussion board (slides)

Researchers in distance education such as Tu and Corry (2002) and Rovai (2000) suggest that without interaction an online course is merely a technologically enhanced correspondence course. Many researchers in the field of distance education express similar sentiments; however, they emphasize the importance of critical thinking in an online course to prevent it from being a correspondence course (Howland & Moore, 2002). Students’ discussion board postings can help students construct knowledge, reflect on what they have learned, and then determine the process by which they learned (Jonassen, 2000).

How do we, as instructors, encourage our students to demonstrate signs of critical thinking and argument development on the discussion board?

Many of the researchers and practitioners stress the importance of the instructor creating a student-centered environment in an online course, especially on the discussion board (Berge, 2002; Hara, 1998; Huang, 2002; Palloff & Pratt, 2007; Vrasidas, 2000). In their study Hara and his colleagues (1998) analyze discussion board postings to ascertain

the number of cognitive skills that were used. One of the results of their study was that they found the students to dominate the conversations. The researchers suggest that the instructor create an environment in which students felt comfortable to demonstrate signs of critical thinking by both writing their own postings and by responding to the postings of others (Hara et al., 1998).

Palloff and Pratt (2007) characterize the instructor as a guide and a cheerleader. The practitioners emphasize that the role of the instructor is still important, for he or she is responsible for asking open-ended questions that encourage critical thinking, providing smaller bits of knowledge in a non-lecture format, and giving feedback that should motivate students to continue thinking critically (Palloff & Pratt, 2007). Instructors must also consider the students who are not self reliant, and they do not see a student-centered environment as a positive attribute of an online course (Howland & Moore, 2002). The researchers found that many of these students who needed more structure and guidance from the instructor seemed less likely to be confident with their own perspectives.

Just as in a face-to-face class, some online students will need more assistance and affirmation from instructors. In a face-to-face class, however, students are often able to use immediate verbal and visual cues to help interpret instructors' expectations and feedback; assessing the situation may be more difficult in an online course. Howland and Moore (2002) assert that, although it may be a daunting task, instructors should find methods by which to provide online scaffolding to support students' construction of meaning. A similar concept to that of scaffolding, modeling, may also be successful in demonstrating expectations to both the independent learners and those who need more guidance (Misanchuk et al., 2000; Vrasidas, 2000). One strategy that Misanchuk (2000)

and her colleagues suggest is for instructors to model ways that students may develop high-quality discussions and questions.

Creating high-quality discussion board questions (slides)

Much of the responsibility of creating a high-quality discussion board experience falls on the instructor (Misanchuk et al., 2000; Palloff and Pratt, 2007; Rovai, 2000). Palloff and Pratt (2007) suggest that discussion board questions should be open-ended and should be just the beginning point for students' critical thinking and thought exchange. Using cues from *Bloom's taxonomy* and other means of encouraging critical thinking, instructors should create questions that model what is expected from students (Misanchuk et al., 2000; Palloff & Pratt, 2007; Thorsen, 2006). In her textbook Thorsen (2006) recommends several ways of creating discussion board questions using Bloom's Taxonomy. A few of her suggestions are to ask students to summarize information they have constructed, to develop questions that encourage students to compare and contrast concepts, and to ask students to critique and discuss someone else's argument.

In their guide to writing, Ramage, Bean, and Johnson (2009) put forth many suggestions as to how a good writer prepares questions for discovery and constructing knowledge about a chosen topic. Although these characteristics will be discussed further in Session 6, many of the suggestions the authors provide are applicable to creating high-quality discussion board questions also. Ramage and his colleagues (2008) suggest that questions should have multiple possibilities which should stimulate students' critical thinking and push the student toward a strong argument development in support of what is considered the best solution. The authors also suggest that questions should prove to be

intriguing, important, and interesting to both the students as well as the one proposing the questions.

Ultimately, the instructor should create and model questions that elicit students' signs of critical thinking, and the instructor should also be a part of the discussion by asking students questions that urge students to explore new depths of critical thinking by asking questions such as *Why?* or suggesting students *tell me (instructor) more*. I believe that it is instructors' modeling of these sort of questions, prompting of students to demonstrate signs of critical, and encouraging them to develop their own high-quality argument that provides a foundation for students to do the same for their peers.

In a previous session we heard about Remler (2002) and her use of *Bloom's Taxonomy* in her course. Many of her experiences with assigning her students to create their own questions for the discussion board have been positive because the students develop questions intended to encourage critical thinking, and Remler notes that the students realize that they are able to discuss what is most important and applies to their lives.

Providing opportunities for multiple perspectives and personal experiences (slides)

A final way for instructors to encourage critical thinking and argument development on the discussion board is to create an environment in which students recognize and respond positively to multiple perspectives of a given issue (Kasworm, 2003; Vrasidas, 2000). Instructors should remind students that there is not one specific pattern for solving problems, and students should explore multiple means by which to establish their own unique perspectives (Vrasidas, 2000). In her qualitative study,

Kasworm (2003) promotes the need for instructors to help students to negotiate meaning by combining their prior knowledge, and perspectives, with the content being studied. Students discussed the value of connections to experiences in an adult world and that these relationships often caused the students to ponder new perspectives that they had not previously considered (Kasworm, 2003).

Students are also often able to produce more high-quality discussion board postings when the questions ask them to construct new knowledge based on their own life experiences (Chickering, 2000; Huang, 2002; Palloff & Pratt, 2007; Swan & Shih, 2005). Students, young and old, bring experiences to the classroom with them. It is logical to consider that the more instructors find ways to incorporate their life experiences with the text they are reading, the more applicable the text should be to the student. Also, students should be more encouraged to attempt the construction of new knowledge by thinking critically when it applies to their own personal experiences (Palloff & Pratt, 2007). Considering your favorite piece of literature (or one you have recently read), what influence did your own life experiences have on your construction of meaning within the text?

APPENDIX H

RESPONDING TO DISCUSSION BOARD POSTINGS

Session—Responding to discussion board postings

It is important for an instructor to create high-quality questions for the discussion boards, and it is also significant that an instructor provides guidelines, encouragement, feedback, and deadlines to help the students produce high-quality responses.

Creating guidelines for students' responses to postings (slide)

The instructor is responsible for guiding students in their actions on the discussion board and establishing perimeters by which they participate (MacKnight, 2000). It might be useful to students if instructors create explicit guidelines for their entire online course to help students know exactly what is expected of them during the term/semester (Palloff & Pratt, 2007; Rovai, 2007). Palloff and Pratt (2007) emphasize developing a set of guidelines for students' postings on the discussion board within the overall guidelines. Creating a set of guidelines for students' interaction and usage of the discussion board clearly establishes the manner in which students should participate and respond. Just as an aside, Palloff and Pratt (2007) also suggest that the instructor create a set of guidelines, explaining what students can expect from the instructor to establish clarity on the instructors' expectations for the class.

Encouraging students to expand thoughts (slides)

Instructors should not settle for yes/no answers on the discussion board. The best way to avoid these answers is to provide questions that ask students to expand their thoughts. Instructors should create questions that encourage students to think outside the box, and then when the instructors respond to those initial postings, they should provide positive, constructive feedback that promotes even more expansive student thinking (MacKnight, 2000; Palloff & Pratt, 2007).

Another way to urge students to expand their thoughts is to use an elaboration heuristic. Instructors may use different variations of a heuristic to develop one that fits their online personalities and their course expectations. An example of an elaboration heuristic that students could complete is provided below.

- My reading tells me ________________________________.
- My understanding tells me ___________________________
- My prior experience tells me ___________________________
- My life experience tells me _____________________________

How might you personalize a similar heuristic to use in your class?

Providing constructive and timely feedback (slides)

Many online instructors face the challenge of providing constructive and timely feedback. *TIME* is the key word that often prevents instructors from providing feedback that is helpful to students and encourages them to reflect on their responses, the instructor's feedback, and what the student learned (Misanchuk, 2000; Palloff & Pratt, 2007; Rovai, 2007; Vrasidas & Zembylas, 2004). One frustration for many online instructors, and sometimes for the students as well, is that many students expect instantaneous feedback from the instructor. Many students may sense that the instructor is not available for conversation because he or she does not respond within the student's allotted time (Howland & Moore, 2002). This is another issue that instructors might want to address is the section of their guidelines that tell the students what they can expect. Rovai (2000) recommended that instructors encourage, and possibly require, peer

feedback as a way to lighten an instructor's load. Of course, instructors should set guidelines for peer review in the course guidelines.

I have established 5 phases for responding to students with constructive feedback constructive. Let's look at them now from a feedback standpoint.

1. Read the posting at least twice to gain an understanding of what the student is trying to say.
2. While reading, the instructor should seek to find something in which he or she might provide a positive response to the student. An example might be, "You provided a new insight that I have never considered in your discussion of the play."
3. If there are points where an instructor questions something a student writes, he or she should mention that after the positive statement, being careful to not be overly critical of the response. An example might be, "I think that you have provided great insight in this situation; maybe you could revisit the text. What features do you see that are different from other pieces we have read? Post a reply letting us know what you find."
4. The instructor should then provide a comment that either encourages the student to think deeper about the initial response or turns the student toward a new thought. The instructor might also ask the student questions that encourage students to find evidence to support their answers. An example might be, "Many of you really enjoyed Chopin's short story, "The Story of an Hour" when you read it. Compare the characters of Nora Helmer in the play *A*

Doll's House and Mrs. Mallard in the short story. Could you provide us with lines from the pieces that support your thoughts?"

5. Instructors might choose to ask the students to provide a way in which they connected with the story or a character in the story, encouraging the students to share life experiences applicable to their readings. An example might be, "Were you able to connect with any of the characters in *Othello*? How do you think it might feel to be wrongly accused of something and then in the end be exonerated?

Creating deadlines (slide)

Howland and Moore (2002) discuss another situation that often occurs in online courses. Many students often have misperceptions of online courses being "work at your own pace" courses. So, students are overwhelmed when they enter the course and find that there are established deadlines. However, the researchers found that although there were some of the students who were upset with the deadlines, many of the students in their study reported that the deadlines helped them remain on track and helped them manage their time effectively.

APPENDIX I

ENCOURAGING STUDENTS TO THINK CRITICALLY AND DEVELOP HIGH QUALITY ARGUMENTS IN ESSAYS

Session—Encouraging students to think critically and develop high quality arguments in essays

Developing a high-quality argument (slides)

Since we are composition teachers and we rely on textbooks to help us teach students about thinking critically and developing high-quality arguments, it would be helpful to know what some of the textbooks say about these subjects in relation to writing essays. There are many different textbook definitions of an argument. Some of the more general composition textbooks simply define an argument as the writer persuading others to see his or her point of view (Troyka & Hesse, 2005). Other composition textbooks characterize an argument as persuasion, but they also include various steps that may be taken in critical thinking such as using evidence and composing arguments (Reid, 2006).

There are textbooks that focus on the argument (having argument in their title) and provide a little more detailed discussions of the argument, even though some of the writers seem to assume that the reader already knows the definition (Lunsford & Ruskiewiewicz, 2007). Like Reid's (2006) characterization of the argument, many of the textbooks that focus on argument discuss it as persuasion based on other elements such as claims, warrants, evidence, and logic (Barnet & Bedau, 2008; Rottenberg & Winchell, 2006a, 2006b).

Troyka and Hesse (2005) propose that arguments are ways by which signs of critical thinking may be presented. Whether the definition of an argument is simple or complex, the textbooks all agree that there are actions, many of which characterize critical thinking, that must be taken in order to develop a high-quality argument. Basing our discussion on this concept, we will describe an argument as the act of persuading

others by using some or all of the subprocesses of an argument, several of which demonstrate signs of critical thinking.

Review of the subprocesses of an argument and promoting them in students' thinking and writing (slides)

In session 1 we looked at the subprocesses of argument developed that I established from literature on the subject.

Subprocesses	Subprocesses of Argument Development
Subprocesses 1	Pinpoint the problem
Subprocesses 2	Sift through the data to extract possible data relevant to the problem
Subprocesses 3	Introduce a hypothesis to represent working understanding of data relevant to the definition of the problem
Subprocesses 4	Explore other possibilities, searching for both confirmation and disconfirmation of hypothesis
Subprocesses 5	Compile evidence for consideration of most developed and defensible possibilities
Subprocesses 6	Establish a conclusion
Subprocesses 7	Extract evidence from data collection to uphold conclusion
Subprocesses 8	Explain how and why the evidence reinforces the conclusion

Figure 2. The subprocesses which may be used in developing an argument (Hillocks, 2002; Garrison, Anderson, & Archer, 2000; Toulmin, 1958)

.

We also discussed the three categories in which we could place these subprocesses to better determine what purpose each fulfills.

Decision points	Explorations of decisions	Collections for support
Pinpoint the problem		Compile evidence for consideration of most developed and defensible possibilities
	Sift through possible data to extract possible data relevant to the problem	
Introduce hypothesis to represent working understanding of data relevant to the definition of the problem		Extract evidence from data collection to uphold conclusion
	Explore other possibilities, searching for both confirmation and disconfirmation of hypothesis	
		Explain how and why the evidence reinforces the conclusion
Establish a conclusion		

Many of the subprocesses listed in these categories require critical thinking skills, yet these subprocesses serve various purposes in argument development.

Various composition and argument textbooks characterize argument development with different, yet sometimes similar, subprocesses of an argument (Reid, 2006; Troyka & Hesse, 2005; Vandermey et al., 2004). Ramage and his colleagues (2009) define critical thinking as both a noun, abilities that critical thinkers should have, and a verb, actions that critical thinkers should take. Since this is a textbook, the authors find a way to gain the reader's interest and use uncomplicated terminology when they characterize their subprocesses of argument development as skills that students must acquire to "wallow in complexity (Ramage et al., 2009)." We might also describe this wallowing as the inability to tie everything up with a pretty red bow. Regardless of how the

subprocesses are represented, it is clear that students need to incorporate certain subprocesses, some signs of critical thinking, into their thinking and writing.

The Guide to Rating Critical Thinking and Integrative Thinking (GRCIT)
and using it to promote and assess critical thinking in writing (slides)

In his study on teaching argumentative writing, Yeh (1998) explains that he used a holistic scoring instrument to analyze the use of argumentation in his study because the scores are not influenced by the instructor. Although the Guide to Rating Critical Thinking (GRCT) is similar to but not characterized as a holistic rubric, the seven scores provided through the guide should not be influenced by the instructor in the course. The newer version, the Guide to Rating Critical Thinking and Integrative Thinking (GRCIT) will be used in this study ("WSU Critical Thinking Project, n.d).

In the late 1980s, participants in the Washington State University Writing Program held the opinion that there was a connection between writing and critical thinking; however, they did not know how to characterize the relationship. By the late 1990s, the participants could document much of the students' writing improvement; however, students still were not demonstrating satisfactory higher order thinking skills. The participants, therefore, began to question the association between writing and critical thinking (Condon & Kelly-Riley, 2004).

The GRCT, first developed in 1996, was based on the work Toulmin (1958) as well as other researchers in the critical thinking field (Condon & Kelly-Riley, 2004; "WSU Critical Thinking Project, n.d.). Providing their own seven descriptors of critical thinking, which are similar to the subprocesses of argument development, the participants made the GRCT available to WSU instructors (Condon & Kelly-Riley, 2004). Through

research studies, the participants began to see increases in students' critical thinking skills at different points in their academic careers. The reports from the research studies also indicated an increase in students' critical thinking abilities in courses where the instructors provided the students with a copy of the GRCT (Condon & Kelly-Riley, 2004).

According to Condon and Kelly-Riley (2004), the study provided the research participants with several significant findings. Possibly most important is the finding that the lack of connection between students' writing and critical thinking scores demonstrates that having students write does not mean that they will think critically while doing so. The participants also found that there is no one definition of critical thinking that is applicable to all forms of writing in all disciplines. The research participants found that writing often stimulates critical thinking, but the action itself is not a sign of critical thinking (Condon & Kelly-Riley, 2004).

In 2006, educators at Washington State University updated the Guide to Rating Critical thinking to include integrative thinking, then becoming known as the Guide to Rating Critical Thinking and Integrative Thinking (GRCIT) ("WSU Critical Thinking Project, n.d).

Supporting arguments with citations from books or outside sources (slides)

Although students are taught about plagiarism and giving credit to sources, it seems as if they need reminding in every term/semester. It often seems as if asking students to use MLA citations is like speaking to them in a foreign language. So, instructors do need to remind their students about the key issues of citations from books

and other sources. When reemphasizing citation of sources ANOTHER time, instructors should remind students of the following information.

- All work that is not common knowledge or their original thoughts MUST be cited in the essay (in-text citations) and on the works cited page. Failure to cite sources causes the reader to assume that the writer is claiming those thoughts to be his or her own and is also considered plagiarism (Lunsford & Ruskiewicz, 2007).
- Direct quotes, paraphrases, and summaries all require in-text citations in the essay and full citations on the works cited page (Rottenberg & Winchell, 2006a).
- Students should use a guide that provides information for MLA documentation. A supplementary text that offers documentation guidelines is a required text for Troy's ENG 1102 course. A variety of websites that offer similar information are available to the students.
- With the age of the internet and Wikipedia, instructors must be clear and specific as to their definition of credible and reliable sources (Ramage et al., 2009). Many students believe that using Google to find a source is the best solution. They must be reminded that just because a website is on the internet does not mean it is a good source for an essay.
- The instructor should remind the researcher of six considerations to take when selecting sources (Lunsford & Ruszkiewicz, 2007).
    - Does the article focus on the writer's argument?
    - Is it published in a reputable publication?

- Is the author someone trustworthy and reliable?
- Is the article current?
- Does the author cite other credible and recent sources? Do any of the names cited seem to be prevalent in much of the research on the topic?

- Because so many classes do assign research papers, composition students writing about literature need to be reminded that their essays are not research papers.
    - Students need to be reminded that they should be reading a text to construct new meaning and to explain the meaning that they make (Rampage et al., 2009). Therefore, the sources that they attain in their research should support their own findings. Their research should not be the bulk of the essay.

Reemphasizing the important elements of an essay (slides)

Because many online students have been out of an educational environment for many years, it is good to reemphasize the important elements of an essay and to suggest to students that the five-paragraph essay is not the only way to write. Instructors should remind students of the important elements of an essay and review them for those students who might need further explanation.

- The introductory paragraph should state the problem or question that the writer has established and urge the reader to see the relevance in this thought. The introductory paragraph should also include a thesis statement at the end that provides a one-sentence solution to the problem or question, or the argument (Rampage et al., 2009).

- The main body of the essay is the area in which the writer supports his or her thesis. There is not set pattern or number of paragraphs in the body of the essay. It is the writer's challenge to determine the best plan for supporting his or her argument (Rampage et al., 2009).
- The concluding paragraph returns to a comprehensive view of the essay. It is this area that the writer reminds the reader of the answer, or argument, to the question posed in the introduction and shares why this particular answer is important (Rampage et al., 2009). This paragraph completes the writer's thoughts and does not introduce new ideas or concepts. Although the reader is sometimes left to consider unexplored thoughts or possibilities, the concluding paragraph should bring a sense of closure.

APPENDIX J

GUIDE TO RATING CRITICAL AND INTEGRATIVE THINKING

From: "Brown, Gary" <browng@wsu.edu>

To: "Kristi Fuller" <fullekp@auburn.edu>

Date: Thursday - May 15, 2008 7:10 PM

Subject: RE: Critical thinking rubric

Hi Paige,

Please feel free to use the WSU Critical Thinking Rubric or the new Critical and Integrative Thinking Rubric as you see fit. We appreciate the credit, of course, and even more we appreciate hearing more about your study as it progresses!

Gary

Guide to Rating Critical & Integrative Thinking
Washington State University, Fall 2006

For each of the seven criteria below, assess the work by:

a) circling specific phrases that describe the work, and writing comments
b) circling a numeric score

Note: A score of 4 represents competency for a student graduating from WSU.

1. Identifies, summarizes (and appropriately reformulates) the **problem, question, or issue**.

Emerging 1	2	***Developing*** 3	4	5	***Mastering*** 6
Does not attempt to or fails to identify and summarize accurately.		Summarizes issue, though some aspects are incorrect or confused. Nuances and key details are missing or glossed over.		Clearly identifies the challenge and subsidiary, embedded, or implicit aspects of the issue. Identifies integral relationships essential to analyzing the issue.	
Comments:					

2. Identifies and considers the influence of **context** * and **assumptions**.

Emerging 1	2	***Developing*** 3	4	5	***Mastering*** 6
Approach to the issue is in egocentric or socio-centric terms. Does not relate issue to other contexts (cultural, political, historical, etc.). Analysis is grounded in absolutes, with little acknowledgment of own biases. Does not recognize context or surface assumptions and underlying ethical implications, or does so superficially.		Presents and explores relevant contexts and assumptions regarding the issue, although in a limited way. Analysis includes some outside verification, but primarily relies on established authorities. Provides some recognition of context and consideration of assumptions and their implications.		Analyzes the issue with a clear sense of scope and context, including an assessment of audience. Considers other integral contexts. Analysis acknowledges complexity and bias of vantage and values, although may elect to hold to bias in context. Identifies influence of context and questions assumptions, addressing ethical dimensions underlying the issue.	
Comments:					

Contexts may include:

Cultural/social Group, national, ethnic behavior/attitude	**Scientific** Conceptual, basic science, scientific method
Educational Schooling, formal training	**Economic** Trade, business concerns costs
Technological Applied science, engineering	**Ethical** Values
Political Organizational or governmental	**Personal Experience** Personal observation, informal character

3. Develops, presents, and communicates <u>OWN</u> **perspective, hypothesis or position.**

Emerging 1 – 2	***Developing*** 3 – 4	***Mastering*** 5 – 6
Position or hypothesis is clearly inherited or adopted with little original consideration.	Position includes some original thinking that acknowledges, refutes, synthesizes or extends other assertions, although some aspects may have been adopted.	Position demonstrates ownership for constructing knowledge or framing original questions, integrating objective analysis and intuition.
Addresses a single source or view of the argument, failing to clarify the established position relative to one's own.	Presents own position or hypothesis, though inconsistently.	Appropriately identifies own position on the issue, drawing support from experience, and information not available from assigned sources.
Fails to present and justify own opinion or forward hypothesis.	Presents and justifies own position without addressing other views, or does so superficially.	Clearly presents and justifies own view or hypothesis while qualifying or integrating contrary views or interpretations.
Position or hypothesis is unclear or simplistic.	Position or hypothesis is generally clear, although gaps may exist.	Position or hypothesis demonstrates sophisticated, integrative thought and is developed clearly throughout.
Comments:		

4. Presents, assesses, and analyzes appropriate **supporting data/evidence.**

Emerging 1 – 2	***Developing*** 3 – 4	***Mastering*** 5 – 6
No evidence of search, selection or source evaluation skills.	Demonstrates adequate skill in searching, selecting, and evaluating sources to meet the information need.	Evidence of search, selection, and source evaluation skills; notable identification of uniquely salient resources.
Repeats information provided without question or dismisses evidence without adequate justification.	Use of evidence is qualified and selective.	Examines evidence and its source; questions its accuracy, relevance, and completeness.
Does not distinguish among fact, opinion, and value judgments.	Discerns fact from opinion and may recognize bias in evidence, although attribution is inappropriate.	Demonstrates understanding of how facts shape but may not confirm opinion. Recognizes bias, including selection bias.
Conflates cause and correlation; presents evidence and ideas out of sequence.	Distinguishes causality from correlation, though presentation may be flawed.	Correlations are distinct from causal relationships between and among ideas. Sequence of presentation reflects clear organization of ideas, subordinating for importance and impact.
Data/evidence or sources are simplistic, inappropriate, or not related to topic.	Appropriate data/evidence or sources provided, although exploration appears to have been routine.	Information need is clearly defined and integrated to meet and exceed assignment, course or personal interests.
Comments:		

5. Integrates issue using OTHER (disciplinary) **perspectives and positions.**

Emerging		***Developing***		***Mastering***	
1	2	3	4	5	6
Deals with a single perspective and fails to discuss others' perspectives. Adopts a single idea or limited ideas with little question. If more than one idea is presented, alternatives are not integrated. Engages ideas that are obvious or agreeable. Avoids challenging or discomforting ideas. Treats other positions superficially or misrepresents them. Little integration of perspectives and little or no evidence of attending to others' views. No evidence of reflection or self-assessment.		Begins to relate alternative views to qualify analysis. Rough integration of multiple viewpoints and comparison of ideas or perspectives. Ideas are investigated and integrated, but in a limited way. Engages challenging ideas tentatively or in ways that overstate the conflict. May dismiss alternative views hastily. Analysis of other positions is thoughtful and mostly accurate. Acknowledges and integrates different ways of knowing. Some evidence of reflection and/or self-assessment.		Addresses others' perspectives and additional diverse perspectives drawn from outside information to qualify analysis. Fully integrated perspectives from variety of sources; any analogies are used effectively. Integrates own and others' ideas in a complex process of judgment and justification. Clearly justifies own view while respecting views of others. Analysis of other positions is accurate, nuanced, and respectful. Integrates different disciplinary and epistemological ways of knowing. Connects to career and civic responsibilities. Evidence of reflection and self-assessment.	
Comments:					

6. Identifies and assesses **conclusions, implications, and consequences.**

Emerging		***Developing***		***Mastering***	
1	2	3	4	5	6
Fails to identify conclusions, implications, and consequences, or conclusion is a simplistic summary. Conclusions presented as absolute, and may attribute conclusion to external authority.		Conclusions consider or provide evidence of consequences extending beyond a single discipline or issue. Presents implications that may impact other people or issues. Presents conclusions as relative and only loosely related to consequences. Implications may include vague reference to conclusions.		Identifies, discusses, and extends conclusions, implications, and consequences. Considers context, assumptions, data, and evidence. Qualifies own assertions with balance. Conclusions are qualified as the best available evidence within the context. Consequences are considered and integrated. Implications are clearly developed, and consider ambiguities.	
Comments:					

7. Communicates effectively.

Emerging 1	2	*Developing* 3	4	5	*Mastering* 6
In many places, language obscures meaning.		In general, language does not interfere with communication.		Language clearly and effectively communicates ideas. May at times be nuanced and eloquent.	
Grammar, syntax, or other errors are distracting or repeated. Little evidence of proofreading. Style is inconsistent or inappropriate.		Errors are not distracting or frequent, although there may be some problems with more difficult aspects of style and voice.		Errors are minimal. Style is appropriate for audience.	
Work is unfocused and poorly organized; lacks logical connection of ideas. Format is absent, inconsistent or distracting.		Basic organization is apparent; transitions connect ideas, although they may be mechanical. Format is appropriate although at times inconsistent.		Organization is clear; transitions between ideas enhance presentation. Consistent use of appropriate format. Few problems with other components of presentation.	
Few sources are cited or used correctly.		Most sources are cited and used correctly.		All sources are cited and used correctly, demonstrating understanding of economic, legal and social issues involved with the use of information.	
Comments:					

Overall Rating

	Criteria	Score
1.	Identify problem, question, or issue	
2.	Consider context and assumptions	
3.	Develop own position or hypothesis	
4.	Present and analyze supporting data	
5.	Integrate other perspectives	
6.	Identify conclusions and implications	
7.	Communicate effectively	
Comments:		

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APPENDIX K

SOCIAL PRESENCE CUES

Session—Social presence cues

Definition of social presence (slide)

Social presence in an online environment may be defined as the recognition of "feeling, perception, and reaction" to another intellectual individual in the computer-mediated communication (CMC) environment (Tu & McIsaac, 2002). In simple terms, social presence is the recognition that another participant in an online environment is more than just a name in text; it is the realization that there are other real and living people within this virtual environment.

The two sides of social presence (slides)

Much of the literature discussing social presence in online environments refers to this sense of *perception* that other real people are participating in the course (Richardson & Swan, 2003; Swan & Shih, 2005; Tu, 2001, 2002; Tu & McIsaac, 2002; Wise, et al, 2004).

However, more recently researchers have begun to describe social presence as an *action* as well as a perception. Researchers have described social presence as the moves that participants make to project themselves socially and academically into the online classroom. This conceptualization of social presence is not about what the participants sense, both students and the instructor, but it is about what they do (Rourke et al., 1999; Wise et al., 2004).

What do the studies say about social presence? (slides)

Many of the studies on social presence that have been implemented measure for students' perceptions of learning and satisfaction within the course (Gunawardena & Zittle, 1997; Richardson & Swan, 2003; Swan, 2001). In summary, most of the results

reported that students who recognized a high sense of social presence in their courses also reported high levels of learning and strong satisfaction with their courses. The adverse was also often true. Those students who did not recognize a sense of social presence in their courses often reported lower levels of learning and less satisfaction with their courses.

Much of the literature addresses course design but without reference to the actions instructors should perhaps carry out. Several researchers propose that it is the instructor's responsibility to develop activities that promote social presence and to encourage, maybe even insist, that participants are actively engaged in these activities to cultivate the interactions and involvement that are crucial to this environment (Gunawardena & Zittle, 1997; Swan & Shih, 2005; Tu, 2001, 2002; Wise et al., 2004).

Why is social presence valuable? (slides)

After almost ten years of practice and experience, Palloff and Pratt (2007) emphasize the significance of social presence in an online course in their second edition of *Building Online Learning Communities*. Palloff and Pratt (2007) discuss the importance of participants sharing some of their thoughts and feelings to develop a sense of connectedness to other participants in the course. The authors suggest that it is through sharing of personal characteristics and traits and developing a sense of social presence among participants, that trust is often developed within an online course. This sense of trust can provide an atmosphere in which participants may freely exchange ideas. Palloff and Pratt (2007) suggest that when this sense of trust grows among participants, students often go to classmates for feedback and advice rather than the instructor. This newly developed, student-centered atmosphere may help create a sense of an online community.

In their research on social presence, critical thinking, and distance education, the research group of Garrison, Anderson, and Archer (2000) developed the *community of inquiry* model which is grounded in the critical thinking literature. This model posits that higher-order learning, critical thinking, occurs when cognitive presence, social presence, and teacher presence are all in place within a CMC course (Rourke et al, 1999; Garrison et al., 2001). Cognitive presence allows participants to recognize a question, explore the question, gain a better understanding, and develop new perspectives through communication with others recognized as being present in the community (Garrison et al., 2000). Social presence has been discussed previously, but Garrison and his colleagues (2000) elaborate on the importance of social presence for critical thinking to provide opportunities for emotional expression, free exchanges of thoughts, and access to others' ideas that are important for developing an understanding.

Garrison and his colleagues (2000) characterize teacher presence as encompassing the design of the course; developing an environment in which participants feel safe to share, agree, and disagree; and facilitating discussion forums to encourage participants' construction of understanding. The researchers recommend that the instructor should also provide feedback that explains problems, provides possible solutions, and revisits discussed areas within students' work and on discussion board postings to enhance teacher presence.

Social presence cues (slides)

Recognizing the concept of social presence as an action that may promote critical thinking and something that course participants—in this case instructors—can do to project themselves into the class, I recognized a clear distinction among the eight social

cues and divided them into two categories (Figure 1): revealing the instructor and recognizing the participants (Rourke et al., 1999; Wise et al., 2004). Four of the social cues can be categorized as those that reveal the instructor. An instructor's expression of his or her sense of *humor* in an online course environment allows the students to see that the instructor has an individual orientation to what, in the context of a course in an educational institute, is humorous to state to his or her students. The instructor's expression of his or her sense of humor interjects the instructor's presence into the social space of the online course. The instructor's exhibition of *emotions* also creates a better sense of a real person as he or she may express feelings through words, by using emoticons :O), or with capitalization and punctuation. *Providing self-disclosure* about life outside of the classroom is another way in which instructors are able to indicate that they are an individual human presence. Finally, *interjecting allusions of physical presence* (using words like *we* or *our class*) may suggest the instructor's *physical presence* and, thus, make the participant feel connected to both the instructor and other participants.

The other four social cues may be described as those that recognize the other participants. *Using greetings* in exchanges create an awareness that the course is a social space. *Addressing people by name* in communications indicates a sense of the importance of each student that can remind other participants that there are "real" people in the course. *Complimenting others' ideas* for specific features might encourage the individual student to have a sense of relatedness to the instructor that encourages that student to continue the positive actions, and these commendations can make the individual student aware of the student who is being complimented, and, collectively, each student becomes more aware that other students are human individuals. *Offering support or agreement for*

an idea signals to participants that the instructor is reading comments and participating in the class, and it makes the participants aware of the instructor's responses to them as individuals and to help them see others in the class as individuals as well.

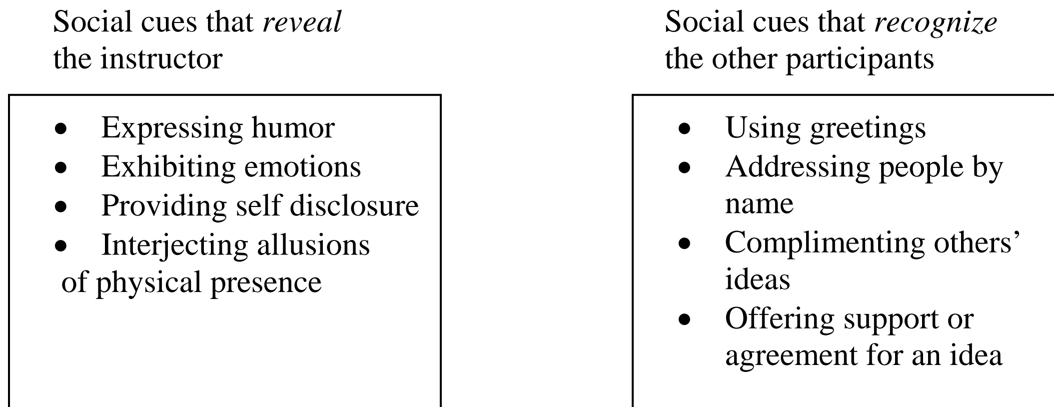

Figure 1. Two categories of social presence cues (Rourke et al., 1999; Wise et al., 2004).

How might you incorporate these social cues into your interactions with students? What are possible results (positive and negative) of using these social presence cues?

APPENDIX L

TRAINING INTERVIEW FOR PARTICIPATING INSTRUCTORS

Training Interview for Participating Instructors

1. What did you find most valuable about the training? Why?

2. Have your thoughts on teaching students to think critically or develop high-quality arguments changed after the training? If so, how? If not, please share any thoughts you deem important points.

3. Are there any remaining areas of apprehension about teaching critical thinking and argumentation skills?

4. What are two realistic outcomes that you hope to observe in your students' writing in the remainder of the term?

5. Was it valuable to practice participating in activities similar to those that you will assign your students? Why or why not?

APPENDIX M

WEEKS 5 AND 6 ASSIGNMENTS

Weeks 5 and 6 Assignments

Play (drama) reading assignment

Students should be required to read the following plays:

- *Trifles* (p. 571)
- *Sure Thing* (p. 603)

Discussion board guidelines

- Students' initial posting should be no fewer than 300 words.
- Students should be respectful of others and differences in opinion.
- Students should not say anything that might be taken in a negative way.
- Students should edit their discussion board postings prior to submission.
- Students should support their thoughts with the text.
- Students should provide constructive (positive and helpful) feedback to group mates.

Week 5 discussion board question

How does the setting of each play impact your understanding of what the author might be trying to say?

Week 6 discussion board question

What one literary device seemed to grab your attention in both of the plays? How did it impact your reading and constructing meaning?

Play Question Heuristic

Answer each of the following questions in detail. Support your answers. You will use these questions for both.

11. What first got your attention when turning to the play?
12. How does using dialogue affect the reading of the play? Does the dialogue impact your reading experience?
13. List three pivotal moments in the play.
14. How would you describe the main idea that the playwright is trying to share?
15. What happened to help you have that "ah ha" moment where you realized what was happening in the play? If you did not have that moment, why do you think you didn't construct a better understanding?
16. What was the setting of the play? Do you think the setting impacted your ability to construct an understanding of the play? If the setting were different, would it change the play? Why or why not?
17. Who would you label the protagonist in the story? Why do you believe this person is the protagonist?
18. Do you think the play would be characterized as a comedy or drama? Why did you make your choice? What characteristics do you recognize in the play?
19. You are a world-famous psychologist, and you have been asked to analyze a few people. Select a character from the story and provide an analysis of that person. Discuss information like mental stability, personality, ambition, motives, and other qualities you notice.
20. How does the author broach the gender issue in the play? Why is gender significant in both plays?

Essay guidelines

- The essay should be no fewer than 900 words.
- The essay should include citations from the text.
- The essay should include both inner citations and a works cited page in MLA format.
- Students should make sure that they answer the entire question and support their answers.
- Students should demonstrate signs of critical thinking and argument development within their essays.

Essay 2 assignment

Compare and contrast the issues about gender that are implied in these two plays. Focus on one specific gender as you build your argument.

APPENDIX N

WRITING SAMPLE GRADED WITH THE GUIDE TO RATING CRITICAL AND INTEGRATIVE THINKING (GRCIT)

Writing Samples Graded with the Guide to Rating Critical and Integrative Thinking (GRCIT)

Emerging Essay

Emerging essays will receive a score of 1. Essays will be scored a 1 if there are signs of the various characteristics described in the Guide to Critical and Integrative Thinking (GRCIT). Students should aim to submit more than an emerging essay. A developing essay represents competency. The number for the represented criteria may be found at the end of each comment.

Student essay
ENG 1102

The Tell-Tale Heart

In Edgar Allen Poe's short story, ***The Tell-Tale Heart*** the narrator is a murderer who is telling his tell of murder to the reader. Edgar Allan Poe has written a lot of creepy tails like this one. In this story the narrator is constantly discussing his bosses eye, and how it bothers him. He repeatedly says that he is not a madman, but he sounds like he is.

The narrator starts out by mentioning that he has some kind of disease. He doesn't tell us what it is but he says that it has helped him have good hearing. He talks a lot about being mad. He mentions an idea that he had but he doesn't tell us what it was. It sounds as if the idea was about the boss. He says I loved the old man. He had never wronged me. He had never given me an insult. Then he starts talking about his eye.

I think this is all like a movie where we can hear the narrators thoughts and see things from his eyes. Since the narrator tells the story the reader knows exactly what he is thinking and doing. Poe must have written the story this way to make it more creepy. If

Comment [MSOffice1]: Emerging
This is one example of several grammatical and punctuation errors. There are many errors throughout the essay. **(7)**

Comment [MSOffice2]: Emerging
This is the student's attempt at presenting the issue in his essay. He does not give this much consideration. This thought is one that should be obvious to any reader.
(1) and (3)

Comment [MSOffice3]: Emerging
The student organizes his essay by the events in the story. There is no obvious organization besides the move through the story. **(7)**

Comment [MSOffice4]: Emerging
The student was required to only use his textbook as a source for the essay. However, he does not document any of the evidence he pulls from the textbook, and he does not provide a works cited page.

Comment [MSOffice5]: Emerging
Many of the student's observations were comments obvious in the text and not his own thoughts. **(2 and 5)**

Comment [MSOffice6]: Emerging
Many of the student's observations were egocentric. He did not relate his thoughts to other concepts or ideas. He did not consider other aspects of the story such as the author's craft, using literary devices to create the story. **(2)**

we did not know what the narrator was thinking, the story probably would not be as good. He lets us see the story through the eyes of the one who is making the story.

After the narrator talks about the old man, he says he killed him. As the narrator talks about sticking his head in the door and it taking an hour we can tell that maybe he really is crazy. He thought he had won some kind of game by being able to open the old mans door every night without the man knowing it. By this point in the story I had no doubt that the narrator was crazy. If he were not mad, why would he do these things to the old man?

Apparently the old man had some reason to be scared when he heard the noise he did not go back to sleep. The old man may have had some idea that the man was mad. If the narrator wasn't mad then why did the old man groan in terror? He must have known something bad was going to happen.

As the narrator stood still at the door for an hour he talked about Death in capital letters as if Death could actually come in the room to the man. The narrator seemed to creep into the room like death might come in. When the light came into the room, the narrator reminded us that he had sharp senses. Suddenly he heard a noise that he said was the old mans heart beat. In that kind of situation can you really hear someone's heart beat? And then the narrator suggested that a neighbor might hear the heart beat. That isn't possible. When the narrator kills the old man he reminds us that he is not mad and he says we should know he is not mad because of the way he handled the killing. I kept thinking how could he not be mad. He took the old man apart, and put his body under the floor. He was proud of how no one would be able to tell he hid the body. He even had a tub to catch the blood. It seems like the narrator was really prideful when the police

Comment [MSOffice7]: Emerging
The student fails to clearly support his hypothesis or theme throughout the essay. He states the obvious facts but does not really provide an argument for his hypothesis. **(3)**

Comment [MSOffice8]: Emerging
This is an example where the student only shares his perspective. He does not include the possible perspectives of others. **(5)**

Comment [MSOffice9]: Emerging
The student states a few of his own opinions; however, he does not use other judgments. **(4)**

Comment [MSOffice10]: Emerging
This is a hint of the student's opinion and and a weak attempt at supporting his hypothesis. **(3)**

Comment [MSOffice11]: Student continues to replay the story rather than use the story as evidence to develop a high-quality argument. **(2)**

Comment [MSOffice12]: Emerging
Throughout the essay the student fails to demonstrate evidence of self-reflection or assessment. **(5)**

arrived another sign of his being crazy. He even spent time with the police in the old man's room. This is where the narrator blew his cover. He started hearing a sound, and he tried to cover it up by talking more and louder. At first he compared the noise to the ticking of a watch. The narrator started getting really upset. He knew the police did not hear the noise, but they would not leave the house. All of the noise and even the narrators rant must have been in his mind because he said that the police did not notice. He though that they were making fun of him.

The story ends with the narrator confessing the crime. Although he told the reader he was not mad in the whole story…even though he was. He showed everyone that he was crazy when he admitted his crime. After all of that time he spent being so careful in killing the old man he confessed his crime in no time at all.

Comment [MSOffice13]: **Emerging**
This student did not pay attention to formatting. In this case, he combined several thoughts together. These should have been broken into separate paragraphs. **(7)**

Comment [MSOffice14]: **Emerging**
The student provided a weak conclusion which was just providing an ending to the story. He failed to use evidence to conclude his thoughts. **(6)**

(No works cited page included)

Developing Essay

Developing essays will receive a score of 2. Essays will be scored a 2 if there are signs of the various characteristics described in the Guide to Critical and Integrative Thinking (GRCIT). A developing essay demonstrates competency. The number for the represented criteria may be found at the end of each comment.

Student paper
ENG 1102

The Tell-Tale Heart

In Edgar Allen Poe's short story, *The Tell-Tale Heart* the narrator is a murderer who is relaying his tale of murder to the audience. Poe uses this tale to express his views on humanity and the fact that no matter how insane someone may seem, their own humanity will return them to reality. In the essay, I will discuss the point of view and its affect on the story, how Poe uses symbolism to reveal society's ideal about humanity and how Poe uses his tale to reveal his personal thoughts.

First, let us discuss the point of view of the story. In *The Tell-Tale Heart,* Poe uses the first person point of view (p. 580). This point of view reveals more about the narrator then any other point of view. Poe allows the reader into the mind of the killer, and he or she knows exactly why he is butchering his boss. When the narrator informs the reader that his boss has wronged him in no way, the reader understands that Poe is showing the madness of the main character. The narrator explains that the blind eye of the boss is what has caused him to perform this dreadful act (p. 580). This point of view also allows the reader to see how the narrator has slipped into his madness. During the entire tale, the main character consistently tells the audience and himself that he was not

Comment [MSOffice15]: Although the student punctuated the short story incorrectly, it should not be a major distraction for the reader. **(7)**

Comment [MSOffice16]: **Developing**Student summarizes issue, although details are omitted. **(1)**

Comment [MSOffice17]: **Developing** Student presents own hypothesis clearly. **(3)**

Comment [MSOffice18]: **Developing** Student was required to only use the text as a source. He did document page numbers to support thoughts. **(4)**

mad. This only adds to the ending of the story when his humanity returns and he confesses to the murder.

Comment [MSOffice19]: Developing
Student presents and justifies and supports position. He does not, however, address other views besides those he assumes from the author. **(3)**

Next, Poe uses symbolism to express his idea and views. One of the symbols that Poe uses is the eye of the boss (p. 581). Poe seems to be suggesting to his reader that we can find something wrong in all people, and if we focus enough on the affliction, eventually the affliction will be all that we see. Poe is trying to explain to his audience that one should not focus on the imperfections of society, one should always attempt to overlook these and find a reason to be considerate of fellow human beings. Poe also uses the eye of the boss to express his idea that in all persons, we possess the ability to ruin someone's mindset, even when we are not attempting to do so. The narrator provides this information by expressing when he states that his boss treated him with the utmost respect and dignity (p. 580).

Comment [MSOffice20]: Developing
In a limited way the student addresses both the social and ethical contexts, and he also assumes that the audience would be one interested in being considerate and polite to others. **(2)**

Comment [MSOffice21]: Developing
Student analyzes Poe's writing to determine Poe's ideas. **(5)**

Comment [MSOffice22]: Developing
The student uses the text to support his own thoughts here. **(3)**

However, the eye is what has perplexed and cursed our narrator. The eye is what has forced our main character to commit the deed that he is in the process of explaining to his audience. However, the strongest symbol that Poe uses is the heart at the end of the tale (p. 584). The heart that the murderer hears while the police are in the room is a symbol for humanity. Poe expresses this view by over-emphasizing the characters' madness. Through the story, Poe ensures that his reader sees the main character as a mad man on a delusional mission to massacre his boss.

Comment [MSOffice23]: Developing
Student uses citation from text to support and justify his position. **(3)**

Poe's reasoning for accenting the narrator's madness is to highlight the main character's return to sanity at the end of the tale. The heart beat that the character hears is actually his own humanity reminding him of the atrocity that he has committed. Poe uses the heart as a symbol of the center of a person's being. The symbol of life and

benevolence. Through the use of the heart beat, the character comes to fruition and realizes that he is not as insane as he tries to convince himself and his audience. The heart is Poe's way of showing his audience that the killer has a conscious and has not lost touch with all reality.

Poe uses this story to express some of his views on humanity and society as a whole. Poe expresses his ideology about how society is compassionate and benevolent despite how he writes about the evils of people's minds and actions. Poe relays his hopes that in all human beings you can find some type of good. He seems to believe that in all people you will find, if only for an instance, the resemblance of how we all hope others would be. Perhaps the small instance of the main character revealing his evil deed to the police is how Poe wishes that he could reveal his dark secrets to the world. Through his stories, Poe seems to show his readers more and more about himself through his writings. In most of his writings, Poe shows that behind the evil and gothic writings, he hopes that people are truly good. In most of his stories, including this one, Poe often shows a hidden altruistic side to the main character despite his evil deeds.

In conclusion, the story of *The Tell-Tale Heart* is an example of the way an author can use the first person point of view to express a main character's actions and deepest thoughts. Poe's use of symbolism in the story seems to be the way he both entertained the audience and expressed his personal views and morals. Only Poe could use a story such as this to convey his ideals of society and humankind.

Comment [MSOffice24]: **Developing**
Student briefly identifies the ethical context. (2)

Comment [MSOffice25]: **Developing**
Student considers the social and ethical contexts. (2)

Comment [MSOffice26]: **Developing**
In a limited way student recognizes other positions and view points. **(5)**

Comment [MSOffice27]: **Developing**
The student presents and justifies his own position; however, he does not use evidence (the text) to back this up.
(3 & 4)

Comment [MSOffice28]: **Developing**
Student again shares own thoughts and opinions; however, he does not use the text to support his thoughts. **(3 & 4)**

Comment [MSOffice29]: **Developing**
Student's final sentence implies that Poe's thoughts extend far beyond the story and that readers might be reminded of respecting human kind. **(6)**

Works Cited

X. J., & Gioia, D. (2008). *Backpack literature*. New York: Pearson/Longman.

Mastering Essay

These essays will receive a score of 3. Essays will be scored a 3 if there are clear signs of the various characteristics described in the Guide to Critical and Integrative Thinking (GRCIT). A developing essay represents competency. Students who receive a score of 3 will be considered to have mastered the requirements of this type of writing. The number for the represented criteria may be found at the end of each comment.

Student essay
ENG 1102

"The Tell-Tale Heart"

Many readers might consider Edgar Allan Poe the master of the strange and weird. Most of Poe's works include death of a character, burial of a live character, and strange happenings in the setting of the story. Poe did have an interesting life, living with different families, joining the military, suffering from alcoholism, and marrying his thirteen year old cousin when he was twenty seven (Kennedy and Gioia 40). It is possible that Poe's eccentric life could have had a major influence on his writing. Poe uses abnormal experiences and literary devices to craft a piece of fiction that still intrigue readers today.

Poe uses first-person point of view to create the narrator, who repeatedly reminds the audience, in this case the reader, that he his not mad. The use of the narrator telling the story allows the reader to "see" the story in his or her mind. Had Poe used third person point of view, much of the reader's curiosity would have diminished. In both this short story and "The Cask of Amontillado (McMahan, Day, and Funk 179)" it is Poe's use of first person that allows the reader to have a front row seat as the story unfolds.

Comment [MSOffice30]: Mastering
The student communicates clearly and effective with minimal errors in the essay. His organization and transitions work well throughout the piece. Sources are cited correctly within the text and also on the works cited page. **(7)**

Comment [MSOffice31]: Mastering
Student identifies and summarizes the issue or problem. He also identifies his position on the issue, and he clearly presents his hypothesis. **(1) and (3)**

Comment [MSOffice32]: Mastering
The student clearly identifies his position in the introduction and in his thesis or hypothesis. Each of the supporting paragraphs demonstrate the students development of integrative thoughts. **(3) and (5)**

Comment [MSOffice33]: Mastering
Student recognizes the reader as the audience in this story. **(2)**

Comment [MSOffice34]: Mastering
The student referred to another Poe story as evidence to support using first person point of view. **(4) and (5)**

Although the setting of the story is simple and rarely mentioned, it does add to the sense of mystery in the story. Interestingly, Poe focuses on one room for the setting of the story, the bedroom of the old man. In the story the narrator states, "And every morning, when the day broke, I went boldly into the chamber… (41)." There are few authors who focus on one room for the entire setting of the short story. In her piece "The Story of an Hour," Kate Chopin establishes a setting of the bedroom of the main character (215); however, Poe narrows his setting even further. The majority of the story occurs at the door of the room. The narrator shares his actions with the reader, "And every night, about midnight, I turned the latch of his door and opened it—oh so gently (41)." This focused setting grabs the reader's attention and draws him or her deeper into the story.

Poe uses repetition of thought, the narrator telling the reader he is not crazy, to develop the character and to allow the narrator to remind the reader that he is not a madman. As he begins to discuss the old man, he mentions the man's evil eye. He states, "…for it was not the old man that vexed me, but his Evil Eye (41)." As one reads the story, he or she might start to question this eye. Did the old man physically have an eye that was distorted? Perhaps the eye no longer served its purpose, or maybe it was made of glass. One could reason that the old man's eye was not really evil; it could be a symbol for the narrator's madness. The Evil Eye as the narrator called it could represent the deranged circumstances that the narrator explained to the reader. Another possibility is that, to the narrator, the eye could represent a reason or excuse for his erratic behavior and murder of the old man.

When considering novels such as George Orwell's *1984* in which Big Brother watches everything and everyone in society, one might also consider the Evil Eye as

Comment [MSOffice35]: Mastering
The student uses quotations from the story as evidence to his observations about the setting. **(4)**

Comment [MSOffice36]: Mastering
The student cites another short story in his textbook as evidence of the effectiveness of this setting. **(4) and (5)**

Comment [MSOffice37]: Mastering
Again, the student references a quotation in the text to support his point. **(4)**

Comment [MSOffice38]: Mastering
The student provides a quote from the text as evidence to support his discussion of symbolism in the story. **(4)**

Comment [MSOffice39]: Mastering
The student recognizes an ethical context throughout the novel as the narrator discusses the murdering of the old man. **(2)**

Comment [MSOffice40]: Mastering
The student references a familiar novel he has read as evidence to support his analysis of symbolism in the story. **(4) and (5)**

being a presence that the narrator sensed. After all, the narrator's well-devised and well-executed plans were accomplished in the story. He could have walked away from the house without ever being accused of a crime. However, he began to hear the heartbeat and recognize a presence that over took him and caused him to confess to the crime (44). Perhaps it was this Evil Eye, this ever-watching presence, which foiled his plans in the end.

A final literary device that Poe uses to conclude this twisted tale is irony. Throughout the story, the reader notices all of the detail and effort that the narrator puts into his plan. The narrator spends eight nights plotting and planning the old man's demise. As mentioned previously, the narrator committed the perfect crime. He left the crime scene without a hint of the hideous murder that occurred. However, in his moment of triumph, the narrator, the man who insisted that he was not mad, revealed everything to the police. His perfection and madness ultimately led to his demise. Even though Poe tends to provides stories with twists such as burying someone alive or madness controlling a person, in this story Poe provides a textbook example of irony in that the reader might not expect that the narrator would so easily give himself over to the police after his diligent planning to kill the old man.

At the conclusion of this story, one must agree that Poe is the master of writing and telling an eccentric tale. He creates bizarre tales which most readers enjoy. However, it is the means by which Poe builds these tales that make him a master writer. Poe uses literary devices to tell much of his stories. Through the use of point of view, Poe develops a character that retains the reader's attention with his insanity. Poe uses an eerie setting, which is not uncommon for most of his writings; however, he narrows the focus of the

Comment [MSOffice41]: **Mastering**
The student provides conclusions based on the overall essay, and he reviews supporting details to support conclusion. **(6)**

setting to one room and door. Poe's use of symbolism contradicts the narrator in the story. The author's inclusion of the Evil Eye as the narrator's justification for murder directly opposes the narrator's repetitive reminders that he is not a madman. Irony is the literary device that Poe typically saves for last. His stories usually end with a twist, and those very twists are what readers often enjoy about his stories. Today, there are more horror stories and movies than one could ever read or watch; however, Poe's crafting of a story is rarely noticed or appreciated in present-day novels or on the screen. It is a truly talented writer who can take a story, intersperse literary devices, and create a sense of mystery that will entertain suspense readers throughout the years.

Comment [MSOffice42]: Mastering
The student provides implications based on his discoveries while critically reading and writing about the text. **(6)**

Comment [MSOffice43]: Mastering
The student recognizes that the audience who would most enjoy Poe's stories are those who are entertained by suspense stories. **(2)**

Works Cited

Comment [MSOffice44]: **Mastering**
The student cites sources correctly within the text and on the works cited page. **(7)**

Kennedy, X.J., and Gioia, D. (2008). *Backpack literature*. New York: Pearson/Longman.

McMahan, E., Day, S., & Funk, R. (2006). *Literature and the writing process* (7th ed.). New Jersey: Pearson/Prentice Hall.

Orwell, G. (1984). London: Secker and Warburg, 1949.

APPENDIX O

SOCIAL PRESENCE CUES INSTRUMENT

Social Presence Cues Instrument

This simplistic instrument is designed to help the outside readers determine the number of social presence cues present in the discussion board postings.

Social cues that *reveal* the instructor

Social presence cue	Number of social presence cues in posting
Expressing humor	
Exhibiting emotions	
Providing self disclosure	
Interjecting allusions of physical presence	

Social cues that *recognize* the other participants

Social presence cue	Number of social presence cues in posting
Using greetings	
Addressing people by name	
Complimenting others' ideas	
Offering support or agreement of an idea	

Two categories of social presence cues (Rourke et al., 1999; Wise et al., 2004).

APPENDIX P

CONCLUDING TELEPHONE INTERVIEW FOR PARTICIPATING INSTRUCTORS

Concluding Telephone Interview for Participating Instructors

1. Did you feel that the training benefited you as an instructor? If so, how? If not, what recommendation would you give that might be beneficial to you and others?

2. How do you define critical thinking?

3. How do you define argument?

4. Did you see changes in your students' demonstration of critical thinking after your training session? If so, please provide examples. If not, why do you think that there were no changes?

5. Do you think that the discussion board served as a positive area for students to confidently exhibit signs of critical thinking? Why or why not?

6. Will you continue to use the discussion board in this manner in your future courses? Why or why not?

7. Did you notice the development of more high-quality arguments after your training? Please explain.

8. Do you think that the students demonstrated more confidence in developing an argument in the drama essay? Please explain.

9. Do you feel more confident with the content to encourage students to use critical thinking skills and to encourage them to aim to write high-quality arguments? Please explain.

10. Are there any suggestions for alterations to the training session for future instructors?

APPENDIX Q

TRAINING SESSIONS FOR THE TWO TREATMENTS

Training Sessions for the Two Treatments

Cognitive Training

<u>Week 1</u>

Day 1—Introduction

- ✓ The instructors will be assigned to view the PowerPoint including the following (Appendix C):
    - o I will introduce myself to the instructors
    - o I will ask instructors to introduce themselves to each other
    - o I will introduce the instructors to the cognitive training
    - o I will introduce instructors to the discussion board (DB) for our training
    - o I will suggest instructors have discussion board guidelines and ask them to post their top five guidelines (Appendix C)
- ✓ The instructors will post DB #1, "Getting to know my peer," and provide information about themselves to share with their training buddy.

Day 2—Session 1 Critical thinking, reading, and argument development (PowerPoint)

- ✓ The instructors will view the PowerPoint, discussing the following on Blackboard (Appendix D):
    - o Instructors will review definitions and discussion on critical thinking, critical reading, and argument development. The instructors will consider the importance of these concepts in a student's learning.
    - o I will present my 8 subprocesses of written argumentation in the information about argument development.

- ✓ The instructors will read peer's posting for DB #1

Day 3- Instructors will respond to the question on DB #2. How might we adapt the subprocesses of the argument to change our jargon to something the students will understand? The instructors will be asked to generate a revised version of the subprocesses that would be better for our students.

Day 4—Session 2 Engaged readers (PowerPoint)

- ✓ The instructors will view a PowerPoint including the following information (Appendix E):
  - The instructor will view a session on a historical review of Dewey and engagement.
  - Instructors will be presented a definition and discussion of engaged readers.
  - Instructors will be encouraged to deliberate on why instructors should want students to become engaged readers.
  - This session will conclude with an explanation of how instructors may help students become engaged readers.
- ✓ The instructors will respond to DB #2 and read each others' revised subprocesses of an argument. They will be required to share thoughts, comments, and/or suggestions to their peer.

Day 5— Session 3 Questioning (PowerPoint)

- ✓ Day 1 The instructors will view a PowerPoint including the following (Appendix F):

- One feature of this session will be my discussion of questioning as a method of encouraging students to go deeper in the story (Appendix F).
- The instructor will also receive information on observing the text (Appendix F).
- Creating questions using Bloom's taxonomy (Appendix F).

✓ I will provide the instructors with the heuristic that was used in assignment 1 in their classes to be used as they read the short story.

Day 6—Trying it Out

For this training day the instructors will participate in a reading assignment similar to

the one they gave their students in week 1 of the term.

✓ The instructors will read the short story "The Story of an Hour (p 215)." http://www.vcu.edu/engweb/webtexts/hour/

✓ They will be directed to read over the provided question heuristic so that they will be considering the questions as they read a second time (Appendix B).

✓ The instructors will read the short story again.

✓ The instructors will revisit DB #2 and post DB #3 and share their thoughts about the short story. They will be required to tell their training buddy what they liked (or didn't like) about it. Also, they will share their thoughts on the author's craft in the story such as with the literary devices (e.g., ways the author crafted character, setting, plot, etc.). They will also be invited to share anything else they would like.

Day 7—off

Week 2

Day 1—

- ✓ The instructors will answer the questions on the heuristic assignment.
- ✓ The instructors will post to db #4, sharing their thoughts about the heuristic questions. The instructor will respond to the following questions: Do you think that the questions invited you to use critical thinking? Do you think that these questions would help your students work towards developing a high-quality argument? Please share your suggestions, opinions, and/or comments about the reading questions heuristic.

Day 2—Session 4 Encouraging critical thinking and argument development on the discussion board (PowerPoint)

- ✓ The instructors will view a PowerPoint discussing the following (Appendix G):
  - o The instructors will read literature on proponents who encourage students to use the discussion board.
  - o The instructors will be presented with literature and a discussion on encouraging critical thinking and argument development on the discussion board?

  The instructors will receive instruction on the following:

  - o Creating high-quality discussion board questions
  - o Providing opportunities for multiple perspectives
  - o Helping students relate to personal experiences

- ✓ For DB #5 the instructors will create and post a question based on their reading of "The Story of an Hour" for their training buddy that invites her to think critically and move toward developing an argument.
- ✓ The instructors will revisit previous discussion board postings and make final comments.

Day 3—Session 5 Responding to discussion board postings (PowerPoint)

- ✓ The instructors will review a PowerPoint including the following (Appendix H):
  - The instructor will receive information on creating guidelines for students' responses to postings.
  - The instructor will learn about encouraging students to expand thoughts
    - Instructors will be presented with an elaboration heuristic is another possible one to use. Have students complete/elaborate on the following:
      - My reading tells me____________
      - My understanding tells me _____________
      - My similar prior experiences tell me _____________
      - My life experience tells me _______________
  - I will share my findings on providing constructive and timely feedback (5 phases of constructive feedback) (Appendix H)
  - Instructors will be encouraged to create deadlines
- ✓ The instructors will respond to training buddy's questions on "The Story of an Hour", (DB# 5) demonstrating usage of critical thinking skills and argument development.

Day 4—Session 6 Encouraging students to think critically and develop high quality arguments in essays (PowerPoint)

- ✓ The instructors will review a PowerPoint that discusses the following (Appendix I):
  - o I will provide information, based on literature that discusses developing a high-quality argument
  - o I will provide a review of the subprocesses of an argument and promoting them in students' thinking and writing
  - o I will present the Guide to Rating Critical and Integrative Thinking (GRCIT) and suggest that the instructors use it to promote and assess critical thinking in writing (Appendix J).
  - o I will point out the importance of reviewing the common conventions for citing source texts (Appendix I)
  - o There will be a brief reemphasis of the 3 sections of an essay for those students who need a review (Appendix I) (These final two topics will be extended into Session 7—(research procedures and essay review for cognitive instructors only.)
- ✓ The instructors will revisit DB #5 for the training buddies' comments

Day 5—Writing the Essay

- ✓ Instructors will be assigned the task of creating an outline for an essay on "The Story of an Hour" that should score a 4-6 (high developing or mastering) based on the GRCIT.

- ✓ They will include the following in their outlines, demonstrating characteristics of critical thinking found on GRCIT:
    - Identification of the problem
    - Consideration of preconceived notions about topic
    - Provision of own perspective and/or hypothesis
    - Analysis and presents supporting evidence
    - Provision of alternative views and ideas
    - Conclusion by presenting implications and consequences

Day 6—The instructors will post their outlines to DB #6 for trainer comments

Day 7— Final day

- ✓ The instructors will revisit DB #6
- ✓ The instructors will complete the final training interview via email.

Situational Treatment

The situational treatment provides the same training as the cognitive treatment, with minor assignment abbreviations, except for Week 1, Day 2. Due to the adjustment of the training schedule, the situational treatment training runs differently until Week 2, Day 2. At that point, the training for both treatments is the same.

Day 1—Introduction

- ✓ The instructors will be assigned to view the PowerPoint including the following (Appendix C):
    - I will introduce myself to the instructors
    - I will ask instructors to introduce themselves to each other
    - I will introduce the instructors to the cognitive training
    - I will introduce instructors to the discussion board (DB) for our training
    - I will suggest instructors have discussion board guidelines and ask them to post their top five guidelines (Appendix C)
- ✓ The instructors will post DB #1, "Getting to know my peer," and provide information about themselves to share with their training buddy.

Day 2—Session 1 Social presence cues (PowerPoint)

- ✓ The instructors will review a PowerPoint that discusses the following (Appendix K):
    - The instructors will review a definition of social presence based on empirical and practitioner literature.
    - I will provide the instructors with information on what the studies say about social presence.

- I will challenge the instructors to consider the value of social presence.
- The instructors will receive training about social presence cues.

✓ Instructors will be required to use social presence cues, when appropriate, when responding to all discussion board postings throughout the training.

Day 3—Session 2 Critical thinking, reading, and argument development (PowerPoint)

- Instructors will review definitions and discussion on critical thinking, critical reading, and argument development. The instructors will consider the importance of these concepts in a student's learning.
- I will present my 8 subprocesses of written argumentation in the information about argument development.

✓ The instructors will read peer's posting for DB #1

Day 4—Instructors will respond to the question on DB #2. How might we adapt the subprocesses of the argument to change our jargon to something the students will understand? The instructors will be asked to provide a revised version of the subprocesses that would be better for our students.

Day 5—Session 3 Engaged readers (PowerPoint)

- The instructor will view a session on a historical review of Dewey and engagement.
- Instructors will be presented a definition and discussion of engaged readers.
- Instructors will be encouraged to deliberate on why instructors should want students to become engaged readers.

- This session will conclude with an explanation of how instructors may help students become engaged readers.

✓ The instructors will respond to DB #2 and read each others' revised subprocesses of an argument. They will be required to share thoughts, comments, and/or suggestions to their peer.

Day 6—Session 4 Questioning (PowerPoint)

✓ The instructors will view a PowerPoint including the following (Appendix F):
  - One feature of this session will be my discussion of questioning as a method of encouraging students to go deeper in the story (Appendix F).
  - The instructor will also receive information on observing the text (Appendix F).
  - Creating questions using Bloom's taxonomy (Appendix F).

✓ The instructors will review all previous discussion boards to read and make any final comments.

Day 7—off

<u>Week 2</u>

Day 1—Trying it Out

For this training day the instructors will participate in a reading assignment similar to the one they gave their students in week 1 of the term.

✓ The instructors will read the short story "The Story of an Hour (p 215)." http://www.vcu.edu/engweb/webtexts/hour/

✓ They will be directed to read over the provided question heuristic so that they will be considering the questions as they read a second time (Appendix B).

- ✓ The instructors will read the short story again.
- ✓ The instructors will revisit DB #2 and post DB #3 and share their thoughts about the short story. They will be required to tell their training buddy what they liked (or didn't like) about it. Also, they will share their thoughts on the author’s craft in the story such as with the literary devices (e.g., ways the author crafted character, setting, plot, etc.). They will also be invited to share anything else they would like.

*The situational treatment training will coincide with the cognitive from this point until the end.

APPENDIX R

IMPLEMENTING THE STUDY

Implementing the Study

The study was divided into three segments: pretraining, training, and posttraining. All of the instructors participating in the study were members of the population of instructors scheduled to teach for the designated university in that term. All those who consented were included in the study. The instructors were randomly assigned to the two treatments. The course lasted for ten weeks. The steps for implementing the proposed study were as follows:

1. The researcher developed a Blackboard course for each treatment in order to train the instructors who agreed to participate in the study and, therefore, would be randomly assigned to the two treatments.
2. Instructors who were scheduled to teach ENG 1102 online for the next term were asked to participate in the study and to digitally return the participation form acknowledging their decision whether or not to participate.
3. The instructors were randomly assigned to one of the two treatments: the cognitive treatment or the situational treatment. The instructors' training was based on the outcome of the random assignment.
4. The course was a ten-week course. The study occurred in three stages. Stage one, pretraining, occurred in weeks one and two. Stage two, training, took place in weeks three through five. Stage three, posttraining, occurred in weeks six and seven.

6. The instructors were interviewed prior to the term starting (Appendix A). This telephone interview was used in order to gain a better understanding of the instructors' thoughts on concepts such as social presence, discussion board, and critical thinking. The interview also provided demographic information.
7. To assure that all of the instructors' assignments were equivalent, I developed the entire class for the instructors in Blackboard. They were told that they could adapt the language to meet their own personality traits, but all assignments had to remain the same for the entire term.

The weekly training sessions are detailed below.

<u>Week 1</u>- The instructors were given all assignments and discussion board questions for this week (Appendix B).

a. The instructors assigned the students to read the following three short stories in their literature textbooks: "A & P", "The Story of an Hour", and "The Things They Carried."
b. I provided a question to post on the discussion board based on the reading of the short story selections.

Week 1 discussion board question

Explain why you believe that a character in your favorite assigned reading acted the way he or she did. Make sure you can support your explanation.

ii. I provided the instructor with guidelines and rules for the students to follow.

iii. The instructors were required to have all students visit their groups' postings and post a response to their group mates. I asked the instructors to provide a "good faith effort" grade for the posting since this type of discussion board might be new for both the instructor and the students. Also, this good faith effort grade might encourage students to write and share their thoughts and ideas.

iv. The instructors were required to read the postings and respond to all students' postings, providing constructive feedback. In this study, constructive feedback was a written response, often from the instructor or a peer, which encourages the reader/writer to seek a stronger engagement with the text he or she is reading in hopes of promoting the student's critical thinking skills and argument development. Engagement is operationalized as having an experience with the text. Readers who are engaged those who are able to make meaning of the text, sometimes by including prior experience, in order to develop an new meaning or understanding of the text in a new and more intellectual way. I used the term constructive as the form of feedback to be given because I hoped that, through these responses, students would be encouraged to construct new meaning and knowledge based on what they have already attained

(Berge, 2002; Ovando, 1992). I operationalized constructive feedback by explaining to the instructors that they should complete five phases for each students' posting:

1. Read the posting at least twice to gain an understanding of what the student is trying to say.
2. While reading, the instructor should seek to find something in which he or she might provide a positive response to the student. An example might be, "You provided a new insight that I have never considered in your discussion of the story."
3. If there are points where an instructor questions something a student writes, he or she should mention that after the positive statement, being careful to not be overly critical of the response. An example might be, "I think that you have provided great insight in this situation, but maybe you could try to revisit the text, looking for examples of irony in the story. Then, post a reply letting us know what you find."
4. The instructor should then provide a comment that either encourages the student to think in more detail about the initial response or turns the student toward

a new thought. The instructor might also ask the student questions that encourage students to find evidence to support their answers. An example might be, "You make mention of how the ending of "Desiree's Baby" is not what you expected. Irony is one way literature readers and writers talk about what is surprising in the story. Can you make any interesting connections between the idea of "irony" and your experience being surprised at the end of "Desiree's Baby?"

5. Instructors might choose to ask the students to provide a way in which they connected with the story or a character in the story, encouraging the students to share life experiences applicable to their readings. An example might be, "Were you able to connect with any of the characters in "Desiree's Baby?" How do you think it might feel to be wrongly accused of something and then in the end be exonerated?

v. Once the instructors provided the students with feedback, they posted an announcement to notify the students to revisit the discussion board and post responses to their recent postings and those of their group buddies.

vi. The instructors were required to review all comments and then select five overall comments to use as summary of the discussion. The instructor synthesized the comments by considering five areas of the postings:

1. Students' connection of previous experiences and learning with the story.
2. Students' demonstration of engaged reading in the text. Did students share new meaning or gain a new understanding in the reading?
3. Students' use of reading strategies, ways to interact with text such as taking notes or journaling to better understand the reading, to engage with the text.
4. Students' construction of understanding of the text. Students might share how literary devices influenced their reading experience of a story. If students try to understand the text, then they may read for content and analyze the writer's style or craft.
5. Students' use of the subprocesses of written argumentation.

vii. The instructor posted a summary based on one or more of these five areas. The purpose of this posting was to allow students to gain a better understanding of their own

demonstration of critical thinking skills and to encourage them to develop these skills for future postings.

viii. Instructors used their own grading system in the pretraining. I did not provide the instructors with a scoring guide for this segment.

ix. I collected all of the discussion board postings for the week and pasted them into word documents, removing all students' names (assigning each student a number instead.) Two designated outside readers analyzed the responses and rated them based on the Guide to Rating the Guide to Rating Critical and Integrative Thinking (GRCIT) ("WSU Critical Thinking Project, n.d.) (Appendix J).

x. The outside readers also used the social presence instrument to measure instructors' and students' spontaneous use of social presence cues in their postings.

c. In a study Yeh (1998) finds that heuristics help students' organization and building of an argument; he does, however, recognize that the heuristics used in his study of argument construction may not be successful for students in English literature courses. I provided the instructors with a reading question heuristic based on their students' short stories' reading assignment. These questions began with visual observations about the text, and they moved to more abstract questions that encouraged students to think more critically. The guidelines and

instructions for the reading heuristic asked students to respond to the questions provided. There was no mention of critical thinking or argument development to the instructors or students.

i. This reading heuristic provided the students with three forms of scaffolding. After the students read a short story for the first time, they were told to read over the questions and then read the story again. Therefore, the heuristic scaffolded their reading by giving them hints and suggestions that should have helped them engage in reading and read critically as they read for a second time.

ii. The reading heuristic may have served as a scaffold between the text and the students' use of various reading strategies to that engaged readers employ to help them make meaning of that which they are reading. The heuristic encouraged students to look beyond the surface of the reading and to explore the author's reasoning, thinking, and crafting of the story. This exploration may create new thoughts and understandings for the students.

iii. The reading heuristic also served as a scaffold in that it served as a turning point between the two main assignments, the discussion board and the essay. It is my experience that many adult students are not able to dedicate the time that they would like to their studies due to other

obligations, so this reading heuristic should have helped the students construct a better understanding of the selected short story, and it also should have helped students move from sharing on the discussion board to thinking more critically as they moved toward the essay. By using this heuristic, the students were encouraged to think critically, perhaps often without realizing that they had shifted to a more expansive level of thinking. Where students once read a story just for the moral or the surface meanings, through this reading heuristic, students should be able to determine how the writer's style or craft influenced the piece.

iv. The reading heuristic was not only designed as a scaffold for the students. As the instructors reviewed the pattern of questioning and the types of questions provided, they should have constructed a better understanding of question development and the value of using questions that promote critical thinking so that they may use similar scaffolding in their future courses. In their training both treatments review well-known ways of questioning such as Bloom's Taxonomy. They are encouraged to consider asking questions in such a way that the students must provide an in-depth answer. By preparing this heuristic, I am modeling this type of questioning for the instructors.

d. I attained a copy of the participating students' answers on the reading question assignment by entering the digital drop box and retrieving a copy of the students' submitted work for possible examples or future studies. In the digital dropbox a student's name and assignment number was available to the researcher; therefore, the researcher only retrieved those assignments of participating students.

e. I also provided the instructors with the writing assignment that was due at the end of week 2. Although the pretraining essay question provided to the instructors was very similar to the one that was used in the posttraining essay, the instructors were not given a copy of the GRCIT at this point. This essay served as a baseline to which the posttraining essays could be compared. Therefore, the question was designed to promote critical thinking and argument construction; however, there was no mention of critical thinking or subprocesses of written argument in this essay assignment.

Essay 1 assignment

Select one of the three stories that you read last week. How does the main character in the stories' actions reveal his or her character? In what ways do his or her thoughts and/or actions often oppose each other?

Week 2- Instructors were given all assignments and discussion board questions for this week.

a. The instructors posted another discussion board question I provided based on the students' reading of the same three short

stories. This discussion board posting should have served as another form of scaffolding. Because the students had already read the short stories and completed the reading heuristic, they should have been more confident with their answers in response to the question. So, this discussion board question should have served as scaffolding between previously constructed knowledge and new and deeper understanding to be gained through this question.

Week 2 discussion board question

Discuss how the author's craft in one of the stories you read affected your understanding of the story. What literary devices did the author use to craft the story? How did these devices influence your ability to construct meaning? Use evidence from the text to support your thoughts.

b. The instructors were required to complete the same guidelines as in the previous week.
c. I did not provide a guide for grading during the pretraining. This was a baseline against which the posttraining postings were analyzed.
d. I collected all of the week's discussion board postings for the study participants and pasted them into word documents, removing all students' names (assigning each student a number instead.) The outside readers analyzed the responses and scored

them based on the Guide to Rating Critical and Integrative Thinking (GRCIT) ("WSU Critical Thinking Project, n.d.).

e. The instructors provided the writing assignment I developed and all necessary criteria to the students at the beginning of week two.

    i. I provided the directions and guidelines for the instructors to give the students.

    ii. The instructors were asked to score these essays as he or she would normally grade. No grading procedure was provided during the pretraining.

f. The researcher attained the study participants' essays through the digital dropbox in Blackboard. In the digital dropbox a student's name and assignment number was available to the researcher; therefore, the researcher only retrieved those assignments of participating students. The researcher provided the outside readers with the Guide to Rating Critical and Integrative Thinking (GRCIT) to use as a scoring guide for the essays ("WSU Critical Thinking Project, n.d.).

Essay 1 assignment

Select one of the three stories that you read last week. How does the main character in the stories' actions reveal his or her character? In what ways do his or her thoughts and/or actions often oppose each other?

Weeks 3 and 4- I trained the instructors in both the cognitive and situational treatments in critical thinking/argument development, and I also trained for social presence cues in the situational treatment. I provided the course design during weeks 3 and 4 as well. This provided all instructors with more practice in promoting critical thinking skills and the subprocesses of written argumentation building, and it also provided the situational treatment instructors more opportunity to practice using social presence cues in the discussion board postings. The course design was similar to that of weeks 1 and 2; however, the students were reading and discussing poetry. I began monitoring the instructors' use of constructive feedback and the students' signs of critical thinking at the beginning of week four, the second week of training. At the end of the training, I called the instructors and asked questions based on their thoughts on the training (Appendix L). I had hoped to provide a coaching session based on the data for that week, but because of the brevity in which these classes are taught, I was unable to do as much coaching as I had hoped. I did, however, monitor the situational instructors' use of feedback and their students' signs of critical thinking, and the instructors' and students' use of social presence cues. I reminded the instructors of the social presence training when speaking with them on the telephone and also by email. Because of time constraints, I was unable to coach the instructors as I had hoped.

Week 5- Instructors were given all assignments and discussion board questions for this week (Appendix M).

a. I selected two plays (drama) for the instructors to assign their students to read in their literature textbooks. The students read *Trifles* and *Sure Thing*. The students were assigned to read these two plays, and then they were

required to read them again after reviewing the reading heuristic. Students might not engage with the text in the initial reading, but the discussion board posting and heuristic should act as scaffolds to help students engage with the text and gain new understandings.

b. I provided a high-quality question to post on the discussion board based on the reading of the drama selections. High-quality questions should encourage students to think more deeply than just the surface of the reading. This form of question should act as a scaffold between prior knowledge students attained outside of class and in weeks 1 and 2 and new understandings developed as the students read the plays several times. This question asked the student to seek to better understand the text by considering the author's craft and possible intent, by identifying the setting, and by analyzing what may have been the author's intent in order to provide an answer.

   Week 5 discussion board question

   How does the setting of each play impact your understanding of what the author might be trying to say? Use evidence to support your answer.

   i. I provided the instructors with discussion board guidelines (Appendix M) for the students to follow when writing their answers on the discussion boards.

   ii. For the posttraining discussion board postings, the instructors were reminded to use a copy of the Guide to

Rating Critical and Integrative Thinking (GRCIT) (Appendix J) for grading the students' postings.

iii. As with prior assignments during weeks 3 and 4, I required the instructors to post a student copy of this guide with the discussion board question. The students were reminded to refer to the GRCIT as they answer their questions to assure their demonstration of understanding. Although there was no specific instruction in using this scoring guide to write discussion board postings, the GRCIT served as a reminder to students to include items such as a thesis, supporting points, and examples. By suggesting that the students refer to this scoring guide, the instructors were also recommending that the students follow the pattern provided through the guide. It seemed to me that during these last weeks, the GRCIT became less of a training tool for the students and more of a scaffold to help students construct new meaning and support thoughts.

iv. The instructors were required to read the postings and respond to all students' postings. The CT instructors provided constructive feedback, encouraging the students to demonstrate critical thinking skills, moving toward an argument. The ST instructors provided constructive feedback, encouraging the students to demonstrate critical

thinking skills that also incorporated social presence cues. I reminded the instructors of the important phases of constructive feedback by explaining to the instructors that they should do the following for each students' posting:

1. Read the posting at least twice to gain an understanding of what the student is trying to say.
2. While reading, the instructor should seek to find something in which he or she might provide a positive response to the student. An example might be, "You provided a new insight that I have never considered in your discussion of the play."
3. If there are points where an instructor questions something a student writes, he or she should mention that after the positive statement, being careful to not be overly critical of the response. An example might be, "I think that you have provided great insight in this situation; maybe you could revisit the text. What features do you see that are different from other pieces we have read? Post a reply letting us know what you find."

4. The instructor should then provide a comment that either encourages the student to think deeper about the initial response or turns the student toward a new thought. The instructor might also ask the student questions that encourage students to find evidence to support their answers. An example might be, “Many of you really enjoyed Chopin’s short story, “The Story of an Hour” when you read it. Compare the characters of Nora Helmer in the play *A Doll’s* House and Mrs. Mallard in the short story. Could you provide us with lines from the pieces that support your thoughts?”
5. Instructors might choose to ask the students to provide a way in which they connected with the story or a character in the story, encouraging the students to share life experiences applicable to their readings. An example might be, “Were you able to connect with any of the characters in *Othello*? How do you think it might feel to be wrongly accused of something and then in the end be exonerated?

v. The instructors were required to have the students revisit the comments and post again.

vi. The instructors were required to review all comments and then select five overall comments to use as summary of the discussion. The instructor should have synthesized the comments by considering five areas of the postings:

1. Students' connection of previous experiences and learning with the story.
2. Students' demonstration of engaged reading in the text. Did students share new meaning or gain a new understanding in the reading?
3. Students' use of reading strategies, ways to interact with text such as taking notes or journaling to better understand the reading, to engage with the text.
4. Students' construction of understanding of the text. Students might share how literary devices influenced their reading experience of a story. If students try to understand the text, then they may read for content and analyze the writer's style or craft.
5. Students' use of the subprocesses of the written argumentation. The instructor posted a summary based on one or more of these five areas. The

purpose of this posting was to allow students to gain a better understanding of their own demonstration of critical thinking skills and to encourage them to develop these skills for future postings.

vii. The instructor graded the discussion board postings based on the GRCIT.

viii. I collected all of the discussion board postings for the week and pasted them into word documents, removing all students' names (assigning each student a number instead.) The two outside readers analyzed the responses and rated them based on the Guide to Rating Critical and Integrative Thinking (GRCIT) (Appendix J). The outside readers also used the social presence cues instrument to document the number of times that social presence cues were demonstrated (Appendix O).

c. I provided the instructors with a reading question heuristic, based on the drama reading assignment, which encouraged students to use critical thinking and work toward developing arguments. As with the short story reading heuristic, the questions for the play reading heuristic began with visual observations about the text, and they moved to more abstract questions that encourage students to think more critically. The guidelines and instructions for the reading heuristic asked students to respond to the questions provided. I told the instructors to remind the students to

demonstrate critical thinking, or deeper thinking, and the use of the subprocesses of the written argumentation as they answered the questions. This heuristic should have provided forms of scaffolding like the scaffolding in the previous heuristic used with the short story.

i. This reading heuristic provided the students with three forms of scaffolding. After the students read a short story for the first time, they were told to read over the questions and then read the story again. Therefore, the heuristic scaffolded their reading by giving them hints and suggestions that should have helped them engage in reading and read critically as they read for a second time.

ii. The reading heuristic may have served as a scaffold between the text and the students' use of various reading strategies to that engaged readers employ to help them make meaning of that which they are reading. The heuristic encouraged students to look beyond the surface of the reading and to explore the author's reasoning, thinking, and crafting of the story. This exploration may create new thoughts and understandings for the students.

iii. The reading heuristic also served as a scaffold in that it served as a turning point between the two main assignments, the discussion board and the essay. It is my experience that many adult students are not able to dedicate the time that they would like to their studies due to other obligations, so this reading heuristic should have helped the students construct a better understanding of the

selected short story, and it also should have helped students move from sharing on the discussion board to thinking more critically as they moved toward the essay. By using this heuristic, the students were encouraged to think critically, perhaps often without realizing that they had shifted to a more expansive level of thinking. Where students once read a story just for the moral or the surface meanings, through this reading heuristic, students should be able to determine how the writer's style or craft influenced the piece.

iv. The reading heuristic was not only designed as a scaffold for the students. As the instructors reviewed the pattern of questioning and the types of questions provided, they should have constructed a better understanding of question development and the value of using questions that promote critical thinking so that they may use similar scaffolding in their future courses. In their training both treatments review well-known ways of questioning such as Bloom's Taxonomy. They are encouraged to consider asking questions in such a way that the students must provide an in-depth answer. By preparing this heuristic, I am modeling this type of questioning for the instructors.

d. As another form of heuristic to help students develop critical thinking skills and move toward creating high-quality arguments, I provided the instructor with four samples of student papers, each demonstrating a score based on the Guide to Rating Critical and Integrative Thinking (GRCIT)

(Appendix J). I provided the instructors with a blank copy of each student writing sample, and then I also gave the instructors a scored copy with comments included based on the GRCIT scoring. I challenged the instructors to consider how they would have graded each sample and then compare their grading to the graded sample. After modeling the desired outcome to the instructors, I required the instructor to make the same assignment to the students. I did not ask the instructors about this activity in their final interview; therefore, I did not determine the instructor's use or the instructor's opinion on effectiveness. Providing the students with a student sample that was scored according to the three GRCIT categories: emerging, developing, and mastering, the students should have been able to discuss online features of the sample essays that demonstrate average- compared to high-quality critical thinking and argument development. I did not ask the instructors about this activity in their final interviews. Because I did not interview the students, I am unaware of the type or level of discussion that students had about the model essays.

I also provided the instructors with a writing assignment, similar to the week 2 assignment but based on the drama readings, that was due at the end of week 7. The instructors reminded the students of the importance of thinking critically not only when they read but also as they write. The instructors also presented the 8 subprocesses of argumentation prior to assigning the essay topic and reminded the students to consider these subprocesses as they complete their essays. I did not ask about this in the

final interview; therefore, I cannot speak about the students' interaction with the instructor or other students.

Essay 2 assignment

Compare and contrast the issues about gender that are implied in these two plays. Focus on one specific gender as you develop your argument.

Week 6 – Instructors were given assignments and discussion board questions for this week.

a. I provided the instructors with a discussion board question, based on the reading of plays or dramas. The instructors posted another discussion board. This discussion board posting served as another form of scaffolding. Because the students had already read the plays and completed the reading heuristic, they should have been more confident in their answers of the question. So, this discussion board question should have served as scaffolding between previously attained knowledge and a new and deeper understanding to be gained through this question.

   Week 7 discussion board question

   What one literary device seemed to grab your attention in both of the plays? How did it impact your reading and constructing meaning?

b. The CT instructors provided constructive feedback encouraging the students to demonstrate critical thinking skills, moving toward an argument. The ST instructors provided constructive feedback encouraging the students to demonstrate critical thinking skills, moving toward an argument, that also incorporates social presence cues. The instructors were

reminded of the elements of constructive feedback discussed in previous discussion board postings.

c. I collected all of the study participants' discussion board postings for the week and pasted them into word documents, removing all students' names (assigning each student a number instead.) The outside readers analyzed the responses and rated them based on the Guide to Rating Critical and Integrative Thinking (GRCIT). The outside readers also used the social presence cues instrument to determine the number of social presence cues present in the postings.

d. The instructors provided the writing assignment for this week and all necessary criteria to the students at the beginning of week six. The instructors reminded the students of the importance of thinking critically not only when they read but also as they write. The instructors also reviewed the 8 subprocesses of argumentation prior to assigning the essay topic.

Essay 2 assignment

Compare and contrast the issues about gender that are implied in these two plays. Focus on one specific gender as you build your argument.

i. I provided the directions and guidelines for the instructors to give the students.

ii. I provided another copy of the Guide to Rating Critical and Integrative Thinking (GRCIT) for the instructors to provide the students as they write their essays.

iii. The instructors were required to score the students' essays based on the GRCIT.
iv. I provided outside readers to score the essays at the end of the study.
v. I provided the outside readers with the Guide to Rating Critical and Integrative Thinking (GRCIT) to use as a scoring guide for the essays.
vi. The students were assigned to submit a rough draft of this essay to their peers in assigned discussion board groups at the end of the week. The peers read each buddy's essay and scored them according to the GRCIT. Palloff and Pratt (2007) state that instructors should provide opportunities for their students to provide feedback to one another. They mention, however, that this is not a naturally acquired action, so the instructor must model the feedback as has been done with the discussion board postings (p. 176). Therefore, the reviewers were required to post a letter to each writer in his or her group, providing comments and feedback based on the essay. This exchange took place in a designated area on the discussion board. The instructors were instructed to use adapted versions of the important phases of constructive feedback to give the students guidance in providing constructive feedback. I did not ask the instructors if they fulfilled this requirement in their final interview. I did receive

verbal feedback from two instructors. The eArmy instructor (3) said that her students were very nervous about peer review and begged her not to do it. The eCampus instructor (2) said that her students participated, but it was more hectic than helpful. Several of her students made the same comment on an informal evaluation she made at the end of class. When I asked her why she thought it was so hectic, she told me that she put the students in pairs. I suggested that she try it again another term and put the students in triads. This provides a better chance that two of the students will be able to exchange essays. The peer review guidelines were as follows:

1. Read the essay at least twice to gain an understanding of what your peer is trying to say.
2. On the third reading of the essay, use the GRCIT to score your peers' essays based on the criteria on the scoring guide.
3. Write your peer a letter providing insight as to the areas where the writer met the criteria in that category of the scoring guide. Also, note areas in which the writer did not provide the information required in that category. Provide suggestions of areas of the essay in which your peer might want to focus to assure that he or she provides the information required in that category.

Share areas in which you feel that you need to know more about the problem or issue, and ask your peer to share more in this area.

4. Put the letter aside and then read the essay again, scoring it once more based on the GRCIT. See if you have any new insights or understandings after articulating your findings. If so, write those in the letter and adjust your comments as needed. If not, post your letter to the discussion board with that peer's essay.

Week 7 – The students had designated times to complete each part of this peer assignment. The final draft of the essay was due at the end of the week. I acquired the study participants' final draft through the digital dropbox in Blackboard. In the digital dropbox a students' name and assignment number was available to the researcher; therefore, I only retrieved those assignments of participating students.

Week 8 – I collected all of the participants' discussion board postings and gave them to the outside readers to be scored using the Guide to Rating Critical and Integrative Thinking (GRCIT) and entered the data into SPSS.

a. The outside readers graded the essays from the pretraining and posttraining assignments based on the Guide to Rating Critical and Integrative Thinking (GRCIT). The essays were labeled by numbers, and the outside readers were not told in which segment the essay was written.

Week 9 – The researcher contacted each participating instructor and completed a concluding telephone interview (Appendix P).

APPENDIX S

DETAILED DESCRIPTON OF SOCIAL PRESENCE CUES FOR DISCUSSION BOARD RESEARCH ASSISTANTS

Detailed Description of Social Presence Cues
for Discussion Board Research Assistants

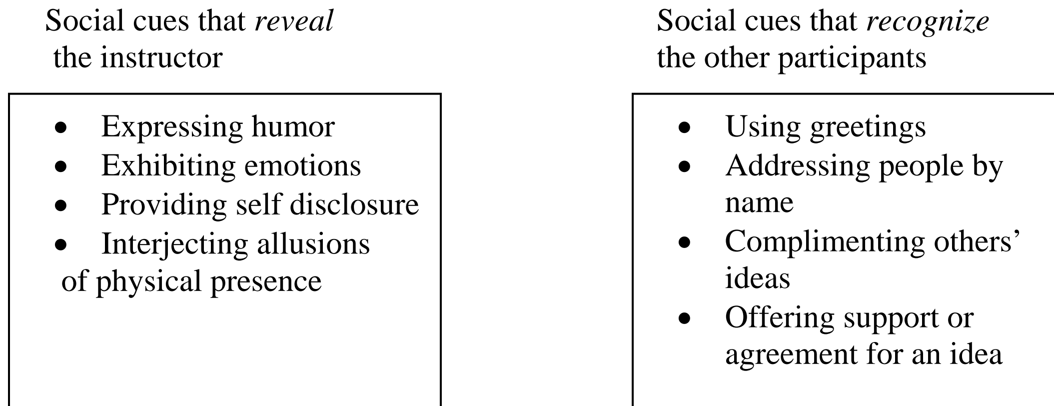

Figure 1. Two categories of social presence cues (Rourke et al., 1999; Wise et al., 2004).

Social cues that *reveal* the instructor

<u>Expressing humor</u>

- Telling jokes *(an actual joke)*
- Sharing humorous experiences or stories *(sharing an " I remember the time" kind of story or experience that is upbeat and/or humorous)*

<u>Exhibiting emotions</u>

- Using emoticons such as :O) or :O(
- Using words in caps for emphasis
- Using punctuation marks for emphasis *(any use of explanation points only)*

<u>Providing self disclosure</u>

- Sharing personal stories *(any kind of "I remember the time" story or experience)*
- Providing background information *(sharing family, friend, occupation, or other personal information)*
- Sharing plans or dreams *(sharing of goals, plans, dreams, hopes etc)*

<u>Interjecting allusions of physical presence</u>

- Using terms such as *today in class*, *our class*, *your classmates, etc.*
- Saying things like *working in groups*, *I'm glad to be with you today, I really enjoyed our time together, etc.*
- Using terms that sounds as if students are in same room with instructor like *welcome to our class, join me as we…., Let's turn in our books etc.*

Social cues that *recognize* the other participants

Using greetings

- Using terms such as *hi, hello, welcome, greetings, or any other type of greeting that you recognize.*

Addressing people by name

- Using one's name when replying to a comment, providing feedback, or offering suggestions.

Complimenting others' ideas

- Pointing toward others' ideas (*You should read John's and Fred's postings; they discussed the same ideas that you did or Have you read Sally's posting? She discusses the same ideas (or something referring to something someone else said).*
- Recognizing the really strong points someone makes *(Susan made this same great observation; check hers out)*
- Suggesting that one participant correspond with another *(Why don't you email or correspond with Jacob and share your thoughts about the story?)*

Offering support or agreement for an idea

- Providing other suggestions to support established ideas *(I think you are on the right track. I thought that she really died from something other than a heart attack too. Remember she created a whole new life for herself while she was in her room* or *I do think that Cross was creating a whole life with her in his mind. She really did not do anything to indicate she felt the same way.)*
- Sharing similar opinions in agreement for an idea *(similar to above)*
- Agreeing with points already made and then suggesting further thoughts *(I agree with you that she died more from just a heart attack. Tell me what you think the Chopin means when she writes "the joy that kills." Or I agree with you that the literary devices really make this story more exciting. Give me a few more examples of the literary devices from the story that really help the reader "get into" it.*

APPENDIX T

ADAPTED GRCIT SCORING GUIDE FOR DISCUSSION BOARD RESEARCH ASSISTANTS

Adapted GRCIT Scoring Guide for Discussion Board Research Assistants

Guide to Rating Critical & Integrative Thinking

Washington State University, Fall 2006

For each of the seven criteria below, assess the work by:

a) circling specific phrases that describe the work, and writing comments
b) circling a numeric score

Note: A score of 4 represents competency for a student graduating from WSU.

1. Identifies, summarizes (and appropriately reformulates) the **problem, question, or issue**.

Does the student address the question that is posed on the discussion board and summarize it in his or her own words?

Emerging 1	2	3	*Developing* 2	5	3 *Mastering* 6
Does not attempt to or fails to identify and summarize accurately.		Summarizes issue, though some aspects are incorrect or confused. Nuances and key details are missing or glossed over.		Clearly identifies the challenge and subsidiary, embedded, or implicit aspects of the issue. Identifies integral relationships essential to analyzing the issue.	
Student makes NO mention of the question posed on the db		Student refers to the question but does not discuss in detail		Student not only mentions the question but addresses it	

2. Identifies and considers th

Does the student consider any of the contexts at the bottom of the page? For example, does he or she recognize what the culture of the piece of writing expects or values? Does he or she recognize personal observation of others or himself/herself? (See list to the left). Does the student recognize other assumptions? (If the student is discussing "Desiree's Baby," does he or she address how the culture recognized mixed children and interracial marriages at the time?

Emerging 1	2	3	*Developing* 2	5	3 *Mastering* 6
Approach to the issue is in egocentric or socio-centric terms. Does not relate issue to other contexts (cultural, political, historical, etc.). Analysis is grounded in absolutes, with little acknowledgment of own biases. Does not recognize context or surface assumptions and underlying ethical implications, or does so superficially.		Presents and explores relevant contexts and assumptions regarding the issue, although in a limited way. Analysis includes some outside verification, but primarily relies on established authorities. Provides some recognition of context and consideration of assumptions and their implications.		Analyzes the issue with a clear sense of scope and context, including an assessment of audience. Considers other integral contexts. Analysis acknowledges complexity and bias of vantage and values, although may elect to hold to bias in context. Identifies influence of context and questions assumptions, addressing ethical dimensions underlying the issue.	
Student does not answer any of the questions to the right.		Student addresses some of the questions on right.		Student addresses EVERY question	

Contexts may include:

Cultural/social Group, national, ethnic behavior/attitude	**Scientific** Conceptual, basic science, scientific method
Educational Schooling, formal training	**Economic** Trade, business concerns costs
Technological Applied science, engineering	**Ethical** Values
Political Organizational or governmental	**Personal Experience** Personal observation, informal character

3. Develops, presents, and communicates OWN **perspective, hypothesis or position.**

Emerging 1	***Developing*** 2	3 ***Mastering***
1 / 2	3	5 / 6
Position or hypothesis is clearly inherited or adopted with little original consideration.	Position includes some original thinking that acknowledges, refutes, synthesizes or extends other assertions, although some aspects may have been adopted.	Position demonstrates ownership for constructing knowledge or framing original questions, integrating objective analysis and intuition.
Addresses a single source or view of the argument, failing to clarify the established position relative to one's own.	Presents own position or hypothesis, though inconsistently.	Appropriately identifies own position on the issue, drawing support from experience, and information not available from assigned sources.
Fails to present and justify own opinion or forward hypothesis.	Presents and justifies own position without addressing other views, or does so superficially.	Clearly presents and justifies own view or hypothesis while qualifying or integrating contrary views or interpretations.
Position or hypothesis is unclear or simplistic.	Position or hypothesis is generally clear, although gaps may exist.	Position or hypothesis demonstrates sophisticated, integrative thought and is developed clearly throughout.
Student does not provide a thesis and does not indicate own thoughts or ideas.	Student alludes to a thesis and uses some of own thoughts to explain i	Student clearly provides thesis and uses mature thoughts and ideas for support

Does student present a thesis, stance, or argument? Does the student provide own thoughts, position, experience, and suggestions to support ideas shared? Does the student show a mature understanding of the issues which he or she is addressing and sharing thoughts?

4. Presents, assesses, and analyzes appropriate **supporting data/evidence.**

Emerging 1	***Developing*** 2	3 ***Mastering***
1 / 2	3	5 / 6
No evidence of search, selection or source evaluation skills.	Demonstrates adequate skill in searching, selecting, and evaluating sources to meet the information need.	Evidence of search, selection, and source evaluation skills; notable identification of uniquely salient resources.
Repeats information provided without question or dismisses evidence without adequate justification.	Use of evidence is qualified and selective.	Examines evidence and its source; questions its accuracy, relevance, and completeness.
Does not distinguish among fact, opinion, and value judgments.	Discerns fact from opinion and may recognize bias in evidence, although attribution is inappropriate.	Demonstrates understanding of how facts shape but may not confirm opinion. Recognizes bias, including selection bias.
Conflates cause and correlation; presents evidence and ideas out of sequence.	Distinguishes causality from correlation, though presentation may be flawed.	Correlations are distinct from causal relationships between and among ideas. Sequence of presentation reflects clear organization of ideas, subordinating for importance and impact.
Data/evidence or sources are simplistic, inappropriate, or not related to topic.	Appropriate data/evidence or sources provided, although exploration appears to have been routine.	Information need is clearly defined and integrated to meet and exceed assignment, course or personal interests.
Student uses no evidence. Shows no signs of understanding the importance of facts	Student uses a little evidence but does not explain how this evidence supports own ideas. Shows little understanding of importance of facts	Student provides evidence from text or outside source to support own thoughts. This demonstrates understanding of the importance of fact

Does the student provide evidence that supports his or her thoughts? This evidence could be from the text or from an outside source. Is any evidence that is provided done so in a clear and organized manner? Does the student seem to have an understanding of the importance of fact vs. opinion?

5. Integrates issue using OTHER (disciplinary) **perspectives and positions.**

Emerging 1 (1–2)	***Developing*** 2 (3–4)	3 ***Mastering*** (5–6)	
Deals with a single perspective and fails to discuss others' perspectives.	Begins to relate alternative views to qualify analysis.	Addresses others' perspectives and additional diverse perspectives drawn from outside information to qualify analysis.	Does the student address the perspectives or understandings of others in the posting? Does the student acknowledge any other positions and respectfully recognize other perspectives with his or her own? Is there any evidence that the student analyzed his or her own perspectives?
Adopts a single idea or limited ideas with little question. If more than one idea is presented, alternatives are not integrated.	Rough integration of multiple viewpoints and comparison of ideas or perspectives. Ideas are investigated and integrated, but in a limited way.	Fully integrated perspectives from variety of sources; any analogies are used effectively.	
Engages ideas that are obvious or agreeable. Avoids challenging or discomforting ideas.	Engages challenging ideas tentatively or in ways that overstate the conflict. May dismiss alternative views hastily.	Integrates own and others' ideas in a complex process of judgment and justification. Clearly justifies own view while respecting views of others.	
Treats other positions superficially or misrepresents them.	Analysis of other positions is thoughtful and mostly accurate.	Analysis of other positions is accurate, nuanced, and respectful.	
Little integration of perspectives and little or no evidence of attending to others' views. No evidence of reflection or self-assessment.	Acknowledges and integrates different ways of knowing. Some evidence of reflection and/or self-assessment.	Integrates different disciplinary and epistemological ways of knowing. Connects to career and civic responsibilities. Evidence of reflection and self-assessment.	
Student does not address others' perspectives or show that there was personal analysis.	Student briefly mentions others' perspectives and shows signs of personal analysis.	Student mentions others' perspectives and demonstrates personal analysis	

6. Identifies and assesses **conclusions, implications, and consequences.**

Emerging 1 (1–2)	***Developing*** 2 (3–4)	3 ***Mastering*** (5–6)	
Fails to identify conclusions, implications, and consequences, or conclusion is a simplistic summary.	Conclusions consider or provide evidence of consequences extending beyond a single discipline or issue. Presents implications that may impact other people or issues.	Identifies, discusses, and extends conclusions, implications, and consequences. Considers context, assumptions, data, and evidence. Qualifies own assertions with balance.	Does the student provide conclusions based on the discussion provided? Does he or she consider all that has been discussed to make final thoughts and summarizations? Does the student discuss possible or future implications based on the discussion provided?
Conclusions presented as absolute, and may attribute conclusion to external authority.	Presents conclusions as relative and only loosely related to consequences. Implications may include vague reference to conclusions.	*Conclusions are qualified as the best* available evidence within the context. Consequences are considered and integrated. Implications are clearly developed, and consider ambiguities.	
Student does not summarize or conclude thoughts and ideas or refer to future implications.	Student attempts to summarize and conclude	Student provides strong summary and conclusion and possibly mentions future implications (not essential)	

7. Communicates effectively.

Emerging 1 (1–2)	*Developing* 2 (3–4)	3 *Mastering* (5–6)
In many places, language obscures meaning.	In general, language does not interfere with communication.	Language clearly and effectively communicates ideas. May at times be nuanced and eloquent.
Grammar, syntax, or other errors are distracting or repeated. Little evidence of proofreading. Style is inconsistent or inappropriate.	Errors are not distracting or frequent, although there may be some problems with more difficult aspects of style and voice.	Errors are minimal. Style is appropriate for audience.
Work is unfocused and poorly organized; lacks logical connection of ideas. Format is absent, inconsistent or distracting.	Basic organization is apparent; transitions connect ideas, although they may be mechanical. Format is appropriate although at times inconsistent.	Organization is clear; transitions between ideas enhance presentation. Consistent use of appropriate format. Few problems with other components of presentation.
Few sources are cited or used correctly.	Most sources are cited and used correctly.	All sources are cited and used correctly, demonstrating understanding of economic, legal and social issues involved with the use of information.
Too many writing errors affect the reading of the essay and the reader's ability to comprehend meaning	Posting has some errors but is still comprehendible and the thoughts are somewhat organized	Student has no apparent errors and demonstrates clear organization

Does the student's use of language (punctuation, grammar, word choice, etc.) affect his or her ability to communicate? Does these errors distract the reader? Are the student's thoughts organized well? Students probably will not cite sources on the discussion board, but if a student references another work, does he or she give credit to that source?

Use the sheets that I provided to score these discussion board postings rather than the tally table that they provided here.

Comments:

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APPENDIX U

STUDENTS' FINAL COMMENTS FROM INSTRUCTOR 2'S COURSE

Students' Final Comments from Instructor 2's Course

Student 24
I truly enjoyed how she made herself available to students anytime. I loved how she made us look deeper than the surface of a story and to break it down into more than just lines of text. That really made a difference in how I was able to comprehend the stories we read. Her discussion board projects were simply an amazing idea. They got the class motivated to work together and they helped us, as students, work together better. The boards really helped me to appreciate my fellow classmates' opinions and to pay better attention to their suggestions. Having never experienced an online classroom environment before, the way this class was operated really made the experience enjoyable. Although there is no "real" interaction with my classmates, the virtual interaction was just as good. I was able to provide and receive feedback and to get help or suggestions during assignments.

Student 28
The blackboard discussions are the backbone of the course due to the nature of online curricula, this is the only constructive criticism a student may receive unlike a normal classroom environment

Student 44
While, in this class I have learned how to be more critical and to think in a new way. The discussion board posts and interacting with my classmates were a great part in having to do with me having fun in your class.

Student 55
I learned about short stories, plays, and poems in depth. It was different from other classes, because in this class the writings were interesting and I actually wanted to read them. ☺ In other classes, the writings have been about topics that were not easily understood and not relatable to real life.

I was able to take my knowledge and use it in "real life" situations. I caught myself comparing "The Story of an Hour" to a television show just this past weekend. Normally, that would not happen.

I learned how to analyze all types of writing as well as pick out various literary devices. The discussion boards were thought provoking and the feedback I received made me think even more

Student 49
This is my third try at English 1102 so I can honestly say that I was not looking forward to taking this class again. I have never enjoyed writing and I can say that it is still not my favorite subject but I have enjoyed the class. The discussion boards were great. I like the way you replied to them not in just a good job manner but by asking more questions to invoke more thought about the subject. The participation by other students is also good

because everyone sees each piece of work in a different way. Yes, the discussion board ran extremely well this term!

Student 38
Initially I was very apprehensive about taking an English class of this level online. I had taken online courses before but they were usually IT (Information Technology) related courses. I quickly found out that I had nothing to be afraid of. I was impressed by the easy and quick access that I had with Instructor 2. She was always very responsive to any questions that were posted in the discussion board or sent via email. It was also very helpful that she set up a discussion board just for us to ask questions. This was helpful because you could look through the previous questions to check if yours may have already been answered and you wouldn't have to waste your time or Mrs. Hensarling's time by posting the same question again. ☺ You would NEVER believe the number of repeat emails I get!

I also enjoyed the interaction with the other students in the discussion boards. It was very helpful to get other points of view on your opinion of the assignments. The discussion board ran VERY well in this class. It doesn't always work out this way. There was definitely a lot of writing in the class which I expected but all the writing assignments made you look at the short stories, poems or dramas from different aspects. The gender issue in the dramas was very thought provoking and it made you really take a close look at all the different literary tools the author used in their writing. I definitely gained a lot of confidence in my writing abilities as a result of taking this course.