Dissertation Abstract:

This dissertation examines Vygotsky’s theory of imitation and its relationship to the zone of proximal development. After noting incongruities within scholarship regarding the ZPD, I discuss the similarities between Vygotsky’s theory of imitation and Bandura’s theory of modeling. Based on this discussion, I operationalize Bandura’s paradigm for successful modeling, introduce his notion of self-efficacy, and describe how modeling and imitation provides students an opportunity to achieve mastery skills needed in a peer review session, skills which are effective in changing an individual’s sense of efficacy and increases motivation for peer review and engagement in the writing process. This semester long, exploratory study used pre and post Self Efficacy surveys (see Bandura, Pajares, Zimmerman), pre and post in class writings, and an informal interview to generate data; results indicate that modeling and imitation increased student ability and engagement with peer review. Moreover, the participant’s favorable claims for peer review and the effects which modeling had on them suggest that modeling cognitive strategies changed these writers’ attitude toward revision and the peer review process. By providing observable behaviors and allowing students to imitate these behaviors, the mystique of the peer review process and the interpretive demand of the rough draft was reduced. In addition, understood as an important step in the writing process, students were using it in other writing tasks and intended to continue using it beyond the composition class.

Key terms: Imitation, Peer Review, Writing Center, Zone of Proximal Development, Modeling
THE GIVE AND TAKE OF PEER REVIEW: UTILIZING MODELING AND IMITATION

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Chapter 1: Introduction

Writing centers are increasingly significant units within college, university, and even high-school settings. They are charged with helping students—potentially every student in the institution—write better. Surprisingly little scholarship examines how students best acquire the skills and abilities writing centers have to offer, yet at the heart of writing center (WC) culture persists the claim “we make better writers, not better writing” (North, 1984). This claim reinforces and justifies structuring centers with nonprofessional peer writing tutors, people who write well but oftentimes do not know why they write well. When tutors are being trained, they are directed not to tell the writer how to improve the writing (assuming the tutors do know) but to instead lead by Socratic method, a method of questioning writers about confusing passages or prompting writers to understand where (and perhaps why) readers are confused by their text. We call this pedagogy nondirective (DiPardo 1992; Boquet 1999; Clark & Healy 1998). Most WCs subscribe to nondirective pedagogy because it presumably allows for the development of a writer’s autonomy (see below Carrick & Howard, 2006; McAndrew & Reigstad, 2001) while acculturating freshman writers into academia and teaching them how to negotiate their way into other important future discourse communities and to work independently.

Other WC research argues for directive tutoring, which allows tutors to demonstrate, or respond, by answering questions or even changing the writer’s text. Most current WC research explores a blended adaptation of indirect and direct strategies in tutorials (Harris 1983; 1992; Lerner 2002; Rafoth 2000; Murphy 2006; Spear 1984). Still, no one has yet been able to isolate the directive or nondirective events that are effective in WC tutorials; that is, it is not yet possible to identify how these events impact student writing in ways beyond the writer’s statement of satisfaction with the method (Bell, 2000; Lerner, 1997; 2003; Thonus, 2002).
Many, if not all, writing and WC authors (e.g., Briggs & Woolbright 2000; Brooks, 1991, 2001, b2008; Bruffee, 1984; Carrick & Howard, 2006; Clark & Healy, 1996; Flynn & King, 1993; Harris, 1992, 2001; Horne, 2012; McAndrews & Reigstad, 2001; Murphy & Stay, 2006; Olsen, 1984; Rafoth, 2000; Shamoon & Burns, 2008; Spear, 1984) identify the social nature of learning how to write well by means of indirect and direct reference to Vygotsky’s cognitive theory of language acquisition, specifically using terminology such as imitation, modeling, and the Zone of Proximal Development, or ZPD.

This dissertation aims to identify whether allowing for direct intervention by imitation can be effective in WC tutorials. To that end, my study opens with a discussion of ancient philosophers’ views of imitation and provides a discussion on Vygotsky’s three central constructs: imitation, the zone of proximal development, and ego speech. After noting incongruities within the scholarship and with respect to Vygotsky’s texts on imitation, I discuss Bandura’s use of modeling, noting the similarities with Vygotsky’s assertions of imitation. Based on this parity, I operationalize Bandura’s paradigm for successful modeling, introduce his notion of self-efficacy, and describe how modeling provides students with the opportunity to achieve mastery of skills, skills that are effective in changing an individual’s sense of efficacy and in increasing motivation. Following that, I discuss students’ written responses in terms of the process of modeling and imitation. In the concluding sections, I turn to findings, success, and drawbacks of this study. The following sections address imitation, then shifts to modeling.

**Imitation**

**History of Imitation**

The term imitation has various meanings. Depending on the context of its usage, the term can be understood either positively or negatively as doing the imitation or observing another (i.e.
modeling) with the intent of imitating. In the field of writing studies, imitation may mean any of the following: to copy, as in plagiarize; to emulate, as in pay homage to (e.g., “quoting”); to repeat, as in practice or learn by doing; to model, as in demonstrating or instructing; to replace, as in paraphrasing; and to prove, as in enacting or giving example.

As a pedagogical practice, imitation has been recognized since antiquity; early Greek and Roman teachers considered it an important cultural practice within the educational system. From the earliest Greek rhetoricians, imitation was a commonly used, stable practice for learning how to compose and perform. Schools of rhetoric first used elementary exercises, called *progymnasmata*, in which imitation, paraphrasing, translation, and amplification were applied to sequentially more complex kinds of texts, well-known fables, sayings, speeches, and axioms. The *progymnasmata* exposed students to conventions of grammar, style, form, and appropriate social issues in preparation for citizenship. The prescriptive format may seem limiting, but by the time students were amplifying older texts and speeches, they were employing high levels of interpretation and invention.

**Isocrates.** Some of the earliest records of imitation associated with learning involve the practice of declamation in which young scholars recited and copied speeches of revered Sophists or earlier logographers. Isocrates (early 4th BCE), an early Greek philosopher and educator, believed that “by emulating those who are praised,” the learner would desire the same station in life [9.77.1] (Gagarin, 200, p. 155), thereby creating a consistent standard for cultural practices and moral standards. In practicing the public speeches of others, Isocrates commented, “[S]tupid children grow into their intellect” [9.77.1]. Isocrates also noted that poets can create and elaborate, but prose writers must “use with precision only words and arguments in current use and must keep to their topics” [9.10.1] (p. 140) for the purpose of “those who wish to take the
trouble and are willing to be the best to imitate the character and thoughts of others that are represented in speeches” [9.74.2] (p. 155).

Unlike later thinking (see below), Isocrates did not see writing by imitation as a rote experience that excluded originality, but rather as “a model for creative activity.” To describe the model, he compared what we might now call semantics and syntax, imitation based on the latter. As Isocrates observed, the “function of letters [may be] unchanging and remain the same” yet the “the function of words is entirely opposite. What is said by one speaker is not useful in a similar way for the next speaker. . . . A man seems most artful when he both speaks on the subject and discovers new ways to say it” [13.12.4] (Gagarin, 200, p. 64). With these methods of written and oral imitation, Isocrates believed a good education lead to discovery and to practice as a good citizen (p. 64).

Aristotle. In On Rhetorics, Aristotle (late 4th C, B.C.) only alludes to teaching by means of the progymnasmata. For example, when discussing proofs, or pistis, we are told that there are two kinds, one kind of proof, the nonartistic or atekhnoi, comes from examples or models, and the other kind of proof, the artistic or entekhnos, comes from invention by the rhetor: one can prepare a proof by “method and by ‘us’; thus one must use the form and invent” [1355b.2.] (Aristotle, p. 37). This seeming off-handed reference to “method” and “form” coupled with “atekhnoi” suggests that students were already familiar with the texts the teacher used as examples. Part art, part imitation, Aristotle’s rhetoric encouraged learning by example and by creative application.

Aristotle discusses imitation (or mimesis) as length in the Poetics, where it becomes the very aim of poetic production. Here, imitation is an artful, goal-driven activity, an attempt to represent nature’s perfection before the eyes, a pro ommaton. In contemporary parlance,
imitation provided audiences a way of acquiring empathy through vicarious experience:

Thus the reason why men enjoy seeing a likeness is, that in contemplating it they find themselves learning or inferring, and saying perhaps, “Ah, that is he.” For if you happen not to have seen the original, the pleasure will be due not to the imitation as such, but to the execution, the coloring, or some such other cause. (Aristotle, 1448b.IV.5)

Aristotle believed that humans were mimetic by nature: that “the instinct of imitation is implanted in man from childhood, one difference between him and other animals being that he is the most imitative of living creatures, and through imitation learns his earliest lessons” (Poetics, [1448b.IV.1.2]). Accordingly, performance, such as oratory, music, theater, poetry, and painting that aroused emotion or understanding provided performers and audiences examples of arête, or human excellence, and perhaps a model for which to strive—or not to strive [1448b.IV.1.21).

Cicero. By the time of the Roman Empire, imitation’s place in learning had shifted. Cicero, a Roman rhetorician and statesman (c. 50 BCE), questioned the Greeks’ practice of imitation, finding their premise tautological. Relying on a prior, supposedly better authority, Cicero argued, undermined the ethos of the current teacher’s authority to instruct. He further argued that the Greeks’ premise for imitation was a mere modest deflection from the teacher’s greatness (a Greek virtue). As a Roman, Cicero did not ascribe to this kind of modesty but did encourage imitation of his writings, saying it was better to model the student’s own teacher; this practice gave credit to the teacher’s expertise while minimizing the growing abundant requisite examples a student had to explore and imitate (Cicero, p. 181[B.I.C.XXXIV.]). Of importance,

1 The issue of mimesis and its association with catharsis are very complex issues beyond the scope of this study. See the intro to On Poetics, http://classics.mit.edu/Aristotle/poetics.html. Trans. by S. H. Butcher
Cicero indicates that a shift has taken place. Writing is not just a skill involving copying but something more:

The chief point of all is that . . . we hardly ever practice (for it requires great labor, which most of us avoid); I mean, to write as much as possible. . . and not without reason; for what is meditated and considered easily surpasses sudden and extemporaneous speech; a constant and diligent habit of writing will surely be of more effect than meditation and consideration itself; since all the arguments of relating to the subject on which we write, whether suggested by art or by a certain genius and understanding will present themselves and occur to us, while we examine and contemplate it in the full light of our intellect; and all the thoughts and words, which are the most expressive of their kind, must of necessity come under and submit to the keenness of our judgment while writing.

[B.I.C.XXXIV]

In the past students, who wrote out speeches received, as byproduct, an increased vocabulary and an understanding of the power of deliberative word choice. But now, Cicero states, imitation through the medium of writing seems to be exacting a higher level of awareness.

Cicero’s notion of imitation had a long-term effect on language and teaching of writing because it helped transform Latin from a practical language into a “versatile literary medium capable of expressing abstract and complicated thoughts with clarity” (Micken, 1970, p. xv). Imitation was a method of teaching, and certainly all the revered speeches recorded by the Greek orators provided a sound basis for educating those who came after well into the Roman era. Unfortunately, only four of the ancient progymnasmata texts survived into the new millennium. The favored progymnasmata of Quintilian’s De Institutes was presumed written by the ancient Greek, Aphthonius (5th BCE).
**Quintilian.** Quintilian’s pedagogical discussion of imitation supports Cicero’s theory in the practice of the *progymnasmata*. Imitation was still understood as a viable process for acquisition of skills: “[N]o small portion of our task lies in imitation, since, although invention came first and is all-important, it is expedient to imitate whatever has been invented with success” (1920, Book X. I. 30-11. 3). At the same time, imitation had ostensibly fallen into disfavor. What once was cultivated was now to be watched. *Imitatio* is “not sufficient of itself for no other reason than it is the mark of an indolent nature to rest satisfied with what has been invented by others” (10.2.4.). As the cultural concerns driving the practice of reading, writing, and speaking shifted, imitation was increasingly viewed a weak contributor; “[I]f copying were the only state of being then nothing would have been invented” (10.2.4.). Imitation is no more than a shadowing that is “inferior” to nature, the real thing, much in the way that an artist’s rendering, whether acting, painting, or other kind of performance, is artifice. The practice of imitation is no longer paid homage, but considered “artificial and moulded to a purpose which was not that of the original.” The act of declamation and rote copying “have less life and vigour than actual speeches, since the subject is fictitious. Again, the greatest qualities of the orator are beyond all imitation” (X.II.11-14). For Quintilian, those who only imitate are conceited, empty, reckless, and lacking inventive ability (X.II. 14-17).

**Late Middle Ages.** The classical Greek and the Roman eras understood imitation as an effective strategy for instruction. After the invention of the Gutenberg press in 1468, the practice of imitation was increasingly associated with rote learning or a borrowing others’ perspectives and words or, at its most extreme, thievery (plagiarism). Contemporary scholars such as Ruthven (2001) provide a historical account of imitation as copying (i.e. plagiarism) reaching back to the advent of the Gutenberg press, circa 1440. Some examples of imitation included authors
attempting, as the ancients, to fill in meaning gaps in texts. Other examples were not as noble. Established authors flagrantly stole the oral heritages of neighboring communities or even countries by publishing folklore or ancient and heroic oral stories with the scurrilous author’s name rather than providing the rightful attribution of man, community, or country. This kind of misconduct was a revisionist attempt to appropriate the oral heritages not seen as worthy of the peasantry from which they were taken (a kind of anglophilia). Some authors took credit for another’s work merely for the prestige it garnered them or because the author of the work was not worthy of the social stature associated with such public acclaim or prestige. Others cloaked their identity to gain notoriety (e.g. George Sands). The intellect required to be a writer was considered a birthright of the wealthy, not of commoners or women. The practice of literary forgery, fakes, and hoaxes is not new. Ruthven (2001) suggests that because literature (hence language) is imitative, derivative, and intertextual, it cannot help but be plagiaristic (p. 124). The key question, of course, is where the boundaries between original and copy lie.

In contrast to Ruthven, Costello (2007) suggests that accomplished writers who do not practice imitation mistakenly see it as an inflection of their voice or style (3). Costello, who promotes the practice, views imitation as an ongoing intertextual relationship that builds from and perhaps supports writing behaviors as a “coalescence of dialectic collaboration” (2). She points out that she and other qualified, published authors learned the craft of writing by imitating and suggests that all writers, by paraphrasing, plagiarizing, or patchwriting, are merely appropriating, as the early rhetors did.

In summary, writing center work should not fear imitation but understand it as a strategy that might provide stronger effects in student writing. The act of plagiarism is not always an attempt to steal so much as to understand and acquire a way of knowing. Bawarshi (2008)
examined the complex interaction between imitation and invention, positing that genre 
influences how one might view imitation. We should utilize imitation because of its inventive 
powers originating in the exacting “uptakes” necessary for usage. Uptake, here, involves a kind 
of power over meaning; this uptake/power requires conscious decisions by the imitator, which 
lead the writer to be become aware of significant meaning in particular situations. In that 
awareness, regardless of the passage’s complexity or the imitator’s lack of understanding comes 
a decision to acquire that understanding or linguistic phrasing. An occurrence of uptake, then, 
always involves imitation. As such, imitation should be understood as the learner’s attempt to 
find a place in the existing discourse, an interjection if you will, and not lazy or brazen acts of 
thievery.

Typically, students now understand imitation as a mind-numbing repetitive practice 
considered punishment (and some imitation is—think of writing 100 times on the chalkboard “I 
will not chew gum”). However, Vygotsky characterizes imitation as an important part of learning 
that contributes to development of academic skills, concept development, and development of 
higher mental functions (HMFs). Yet, imitation is the most overlooked, rarely cited aspect of 
Vygotsky’s theories on language acquisition. Vygotsky’s understanding of the term imitation 
does not involve habituation. Habituation (Rieber, 1997, p. 227), denotes repetitious motor or 
instinctual response to a situation or event. Rote, dressage, habituation, these kinds of 
motor/neural responses, in themselves, will not retain the learner’s interest; but repetition has it 
place—habit is always an inherent factor in psychological development (p. 5); imitation 
functions as a catalization (a sensitization of nerve paths) to a way of knowing. Imitation is a 
contrast of mere repetition; it is sensible, purposeful “action based on an understanding that the
imitative carrying out of some intellectual operation” has significance to the imitator (p. 202), a view that is similar to Bawarshi’s claims.

In the empirical research done by Vygotsky and Luria, rote responses, responses which limit invention and discovery, were not present; the “constancy or un-changeability of activity” during investigations never happened” (Rieber, 1987, p. 15). The participating children did not or were unable to repeat exactly actions previously carried out in like subsequent activities.

Habit, then, is subordinate to imitation where imitation indicates “interest,” a developed behavior (Rieber, 1997, p. 8). To emulate is a positive behavior indicating a level of engagement.

Observing, interacting, relying on another contribute to higher mental functions, or deliberate intellectualization. Thus, imitation is one of the basic paths in a learner’s social and mental development (Rieber, 1987, p. 20; 1997, p. 101). And, developing interest into purposeful attention is the key to instruction (Rieber, 1997, p. 166).

How imitation is viewed in writing studies yields conflicting message to students while advocating for authentic voice. As noted, textual imitation has a long history in education and writing pedagogy. Recent, writing scholarship has told students to “borrow” from published authors by finding texts they “like” (Clark and Healy 2008, 1996 p. 62; Rafoth 2000); then they should try to copy that writing style or voice. However, Rafoth notes that having writers focus on imitating another’s text gives more weight to writing quality than content. He further argues that this kind of advocacy for imitation in nondirective tutoring may help explain a focus on lower order concerns (LOC), such as mechanics or grammar, but reduces the tutor to editor. WCIs have fought this status since the early ‘60s.

Many in the field of WC fear that the academy or unknowing faculty will make accusations that tutoring fosters plagiarism (Bruffee 1984; North 1984). Clark and Healy (1996,
challenge those who charge that tutor intervention or the practice of imitation is an invitation to plagiarize, claiming that not only is imitation legitimate, but so is its cousin, paraphrasing (251). Those who advocate imitation’s cognitive benefits assert that imitation is a standard practice in other disciplines, such as music (Shamoon & Burns, 1995, 2008). As such, using imitation in tutoring facilitates the acquisition of new information or behaviors that can then lead to mastery (Harris 1983); through imitation, the student sees how meaning making emerges. When students then use the abstract terms or ideas they have seen modeled, that repetition indicates that the student is internalizing the information (Horne, 2012).

James Bruffee (1984; 2008) points out that people have always learned from peers. But he suggests there are two models that support such peer learning. He refers to one kind of peer learning as the “blind leading the blind” because the tutor regulates existing beliefs (p. 646). The other kind of peer learning is dialectical; in this model, each of the participants share until they arrive at a consensus of meaning based on both perspectives. For Bruffee, knowledge cannot merely be expressed to the learner but is born of negotiated interaction. The discourse of each participant’s perspective creates a new way of knowing. One of the aims of this dissertation is to utilize imitation with the hope that it will become a best practice in the professional development of writing centers. The following then is a review of Vygotsky’s views on the zone of proximal development, imitation, and ego speech.

Three Central Constructs in Vygotsky’s Theory

Zone of proximal development (ZPD). Since the early ‘70s, the ZPD has appeared with varying frequency and importance in the study of tutoring, writing, and education. Its popularity arose ostensibly because the concept of the ZPD made it easy to locate or assign specific interactions between learner and educator before advancing any promising practice for
improving or developing a learner. Because of this, the ZPD has transformed from an auspicious construct from which to build one’s theory to a trope in much of the literature (Gredler & Shields, 2004: Witte & Bracewell, 2001²). As a trope, the ZPD gets conflated with acquisition of skills, specifically as a learning model that focuses on either academic skills or physical behaviors.

However, Vygotsky’s ZPD is not a situated learning event. What most scholars quote is Vygotsky’s simple description of the research model, or the dyad,³ in which his experiments took place and from which he drew his conclusions. Most scholarship focuses on just the two short passages from Mind and Society and Thought and Language:

The ZPD is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Mind in Society, 1976, p.86)

and--

The discrepancy between a child’s actual mental age and the level he reaches in solving problems with assistance indicates the zone of proximal development. (Thought and Language, 1968, p.187)

Because the passages are so simple and yet striking, they have become the cornerstone of many articles in various disciplines, especially in education, writing studies, and tutoring. From these two passages come loose interpretations wherein expectations of independent learning, ability to

² Witte & Bracewell’s working draft prior to Witte’s passing.
³ The term dyad is most popular in sociology and refers to a dialogic relationship of face-to-face verbal communication between two people, which usually involves the exchange of mutual ideas, thoughts, behaviors, ideals, liking, disliking, and queries and answers. A spontaneous communication that does not extend past a momentary exchange cannot be considered a dyad (see
problem solve, and an emphasis on the instructor’s ability to break the task down are the primary foci and interpretation. Not many scholars reach beyond these assumptions or these two passages. Paraphrasing allows for even greater variance. A scholar in an *NCTE* journal identified the ZPD in the following way:

The child who is able to profit from jointly performed tasks has a larger ZPD and will do better in school because what he can do with help today, he will be able to do independently tomorrow.

With only slight variation in phrasing and no explanation of how terms are understood, this author established enough credibility to then move on to ideas about scaffolding. Without providing a complete understanding of what the ZPD entails and by focusing only on the dyad, this interpretation easily fits with many propositions. For example, in the *American Journal of Education*, we can see more variation from the exact quoting:

[The ZPD] is not only about learning, but also about development . . . under certain conditions the learning process can and should lead the process of the child’s natural development. The result of the difference between the level of development lead by learning and the level of natural unmediated development (no teachers/peers) produces the ZPD.

Here, the example puts learning as the content of the ZPD, and development is secondary. For this author, development is a “natural” and “unmediated” element not requiring instruction or intervention by another person, which is far from Vygotsky’s theoretical stance. Another paraphrase moves the meaning of the ZPD even further from its original:

As children begin to use new words in the presence of a knowledgeable other they often find themselves in what Vygotsky
calls the zone of proximal development, a place for learning that is located somewhere between current understanding and potential understanding (Vygotsky 1978). . . . a knowledgeable person can add meaning to what is familiar to the child when he or she enters the child’s ZPD.

The author understands the dyad as the ZPD in which the learner and teacher create a shared “place” to interact.

Finally, the premise of the ZPD or any of its specific terms becomes unrecognizable and wholly separate from the individual. The example below comes from the *Journal of Technology, Knowledge, and Learning*:

. . . using the internet as a zone of proximal development for teaching indirect speech . . .

My intention here is not to criticize but to point out the multiplicity of meanings and the confluence of terms and ideas that derail us from the true grace of what the ZPD entails.

Any claims that the concept of the ZPD is vague or that it may have been left undeveloped with Vygotsky’s passing (Chailklin 2010) may be true. Yet, a close reading all of Vygotsky’s work will provide any scholar a far more concise understanding of the direction Vygotsky was trying to take psychology. Moreover, even the two most quoted, least respected texts, used above to illustrate the appropriations, have meaningful evidence of what the ZPD entails.

**Imitation.** A full discussion of the ZPD begins in *Mind and Society* on page 86. After describing the dyad, almost immediately Vygotsky asks “What then is defined by the ZPD?” (1978, pp. 86–87), to which he responds, the content of the ZPD is “those [mental] functions that
have not yet matured but are in the process of maturation” (p. 86); the ZPD characterizes mental
development prospectively (p. 87). A definition that includes developing higher mental functions
appears in multiple places in most all of Vygotsky’s works: “[A]ll higher functions have in
common awareness, abstraction, and control” (1994, p. 179), “logical memory, concept
formation, will,” and “cooperation” (Rieber, 1997, p. 203): in total the “willingness to sustain
engagement suggests volition and conscious awareness” . . . the foundational characteristics of
other developing HMFs. (Rieber, 1999, p. 209). Therefore, Vygotsky tells us, “learning is not
development” (1978, p. 90) . . . “at the moment a child assimilates word meanings, masters a
math operation, or written language, developmental process have only just begun” (p. 90). The
iteration of this assertion occurs several times in both texts. For example, “We found that at the
beginning of instruction, these functions could not be considered mature, even in the child who
proved able to master the curriculum successfully” (1994, p. 180). Certainly, the term’s
development and function are problematic when the passages claiming to identify the ZPD are
read in isolation.

Once we understand that the content of the ZPD is not learning but the development of
HMFs arising during collaborative or cooperative interaction, imitation should be the constituent
factor:

[W]hen it was first shown that the capability of the children with equal levels of mental
development to learn under a teacher’s guidance varied to a high degree, it became
apparent that those children were not mentally the same age and that the subsequent
course of their learning would be different. (Vygotsky, 1978, p. 86)

By focusing on what the learner “can do with the assistance of others” indicates a higher level
of engagement. The ability to sustain engagement exposes the learner to more information
which will be processed overtime (p. 85; emphasis mine). The ability to seek out and collaborate with another, more knowledgeable person becomes all important. This ability is “a closer source of development of internal individual properties of personalities,” and “by applying the principle of cooperation for establishing the ZPD, we make possible to study directly what determines mental maturation” (Rieber, 1997, p. 203). Mental operations, such as deliberate attention, memory, abstraction, and focus, are other artifacts of the mind when language is used as a tool. A novice acquires these mental behaviors from observing and imitating a more experienced peer. Engagement in activities requiring dependency on another for resolution or understanding is not enough. The opportunity and willingness “to imitate is indispensable” (Vygotsky, 1994, p. 188). Imitation “indicates a level of development” (Vygotsky, 1978, p. 88) and “compensates for a weakness of motivation and inadequate initiative” (1929, online, sect 2, para1): Therefore, “the case with which [a learner] is able to move from independent to assisted problem solving is the best indicator of the dynamic of development” (Vygotsky, 1994, p. 188). And last, Vygotsky tells us “a full understanding of the concept of the ZPD must result in reevaluation of the role of imitation in learning” (1978, p. 87; emphasis mine).

Vygotsky’s theory of language emphasizes conscious deliberative thinking and differentiates it from the thinking that happens in all animals. Intellect ascends from the conscious use of words as tools, and, as such, is a human phenomenon (Rieber & Carton, 1987, p. 285). Using words as tools to control or coordinate mental behaviors and, by extension, environment allows for the genesis of higher intellectual operations (attention, judgment, reflection, logical memory). These behavior develop in cooperation with another, more experienced individual. It is the “ease with which the child is able to move from independent to assisted problem solving that is the best indicator of the dynamic of development” (Vygotsky,
1986, p. 188; Vygotsky, 1978, p. 85). This view is contrary to most scholarly work on the ZPD. The ZPD is where initial HMFs develop in the course of interaction or cooperation and imitation (Rieber, 1997b p. 201; 1987, p. 209), and dependency or reliance on another for direction and information becomes essential.

School accelerates the development of intellect. Learning concepts in school bring about a “fundamental reconstruction of an individual’s reflection of reality, creating new psychological formations that cannot come of everyday concepts” (Rieber & Carton, 1987, p. 369). This creation happens in part because learning school concepts requires extraordinary effort. That effort changes the learner’s intellect by first developing controlled focus, or concerted attention (Rieber & Carton, 1987, p. 176). Deliberate attention transforms and reorganizes the process of seeking (Rieber, 1987a, p. 157) to one of directed thinking. In order to sustain focus, the individual must understand the significance embedded in the context or situation. The direct and indirect behaviors of the teacher and other students emphasize symbolic activity during school lessons, signaling to the learner what to observe and mimic. In this way, the learner becomes proficient in certain skills before learning how to consciously and volitionally apply them. That is, to mimic the teacher and or more capable peers is to be engaged in the curriculum, which leads to development of mental operations (Kellogg, 2008).

For Vygotsky, the process of language acquisition is, first, to communicate, then to control environment, and eventually to control personal behavior. Personal development at the individual level reflects and is an interaction with society en masse. As society develops its culture, intellect develops with it through the use of use tools (i.e. new technologies need new terminologies, which create new language). This construct has significantly influenced
psychology as well as disciplines concerned with language acquisition and writing studies scholarship.

The many references to the ZPD in Vygotsky’s work were primarily for clinical psychological assessment, or “for measuring diagnostic development” (Rieber, 1997, p. 201) for educational placement. The level of a student’s persistence and willingness to imitate was seen a strong indicator of the intellectual engagement needed for mastery of the curriculum. Unfortunately, no such educational model, assessment, or curriculum placement has come to fruition. Educators have individually attempted to employ the ZPD with little success, partly because they misinterpret the ZPD and also because scholars overlook Vygotsky’s discussion of what happens in the dyad as children problem solve. Chaiklin (2003) identifies how the term is misused, misunderstood, and misapplied: “[T]he ‘zone of proximal development is not concerned with the development of skill of any particular task, but must be related to development’” (3). The foundation of this claim allows Chaiklin to warn other scholars that to use ZPD requires “understand[ing] Vygotsky’s theory, specifically what is meant by development” (3). Even with raising doubts about common interpretations of the ZPD, Chaiklin tells us that “there is not an extensive corpus of material from which Vygotsky’s true meaning, or official definition or interpretation, can be found” (4), and that researching the ZPD would not take long since “several of the texts have considerable overlap in their content. From that point of view, it should be easy to become an ‘expert’ in Vygotsky’s concept, and with no need for an interpretative discussion” (4). But even with Chaiklin’s insight about misinterpretations, his appropriation of the ZPD seems to miss the point when he breaks the concept into two terms, subjective (the functions that are developing in a specific child at a certain stage), and objective (the functions that need to be developed in any child of a certain stage); Vygotsky never made
this distinction. The ZPD is imitative behaviors that are indicative of mental operations maturing, which requires moving from independent learning to dependent learning, not the reverse. Moreover, Chaiklin’s use of the term development seemingly references educational development rather than the development of psychological functions.

Vygotsky was in fact quite clear that the instantiation of voluntary control, a product of the instruction process, which involves both modeling and imitation, eventually contributes to abstract thinking (Rieber, 1997b, p. 231; Rieber & Carton, 1987, pp. 206, 169;). Cooperation/imitation, a behavior Vygotsky understood as a dialectical exchange, facilitate the learner’s advancing psychologically. The interaction and its successful, low-stress exchange ultimately instill motivation in the learner, especially when problems are readily solved. But, solving is not essential for a positive exchange between novice and expert.

It is of primary importance to remember that Vygotsky studied human intellect and that his many references to development were psychologically located. The external context was the foreground from which he analyzed and made his conclusions. However, environment made contributions; “[T]he social environment is the source for the appearance of specific human properties of social development which is concluded in the process of actual interaction” (Rieber, 1997b, p. 203). In other words, the social setting gives significance to the process and warrants the functional value accorded the activity. The principal resource for an individual’s internal development comes of cooperative activities that allow for imitation (Cole et al., 1978, p. 72; Rieber, 1997a, p. 107; 1997b, pp. 201, 9, 52; Rieber & Carton, 1987, p. 209; Vygotsky, 1986, p. 187;). Ergo, mental development presupposes a specific social nature and a process by which learners mentally repeats the intellectual behaviors around themselves. When a learner “develops a method of behavior for guiding him or herself that had previously been used in relation to
another person, he/she succeeds in applying a social attitude to her or himself” (Cole et al., 1978, p. 27). Moreover, when learners imitate other more capable persons, they have begun to move past what they can do to what they cannot do (Vygotsky, 1986, p. 209). The learner may not fully conceptually grasp the meaning or the purpose of the activity, but enjoining indicates a willingness. This willingness to participate suggests the presences of “capabilities of independent mental and purposeful actions or intellectual operations” being functionalized (Rieber & Carton, 1987, p. 206). Vygotsky understands this new behavior as necessary for mental development and for instruction. But while they are interdependent on each other, “the only good kind of instruction marches ahead of development” (Rieber, 1997b, p. 201; Rieber & Carton, 1987, p. 206; Vygotsky 1986), learning and psychological processes are not equivalent processes.

One of the few scholars who comments on the conceptual importance of Vygotsky’s imitation, Chaiklin (2003), limits imitation to a theoretical justification for assessing a child’s ZPD:

The crucial assumption is that imitation is possible because (a) maturing psychological functions are still insufficient to support independent performance, but (b) have developed sufficiently so that (c) a person can understand how to use collaborative actions (e.g., leading questions, demonstrations) from another. The presence of these maturing functions is why the zone of proximal development exists. Alternatively, one can say that the zone of proximal development is defined as referring to those intellectual actions and mental functions that a child is able to use in interaction, where independent performance is inadequate. (p. 9)

This explanation ignores Vygotsky’s observance of imitation as content of the ZPD. Imitation is the practical activity that moves cooperative behaviors from intermental to intramental as they
evolve into intellectual behaviors. Chaiklin’s construct of the ZPD remains focused on teaching protocols and independent performance, disregarding the importance of imitation. To mimic, imitate, model, or copy another’s verbal or physical behavior indicates the beginning of the development of purposive behavior in which learners are attempting to control their mental states.

Developing and or reinforcing deliberate cognitive behaviors through imitation holds great promise for WC work. Currently, WC pedagogy teaches the tutor to support writers by using leading questions as a way to discover or create a higher levels of understanding in their papers (McAndrew & Registad, 2001). Though institutional politics are the taproot for this approach, composition theory attempts to support it as well. Some research has suggested that the act of writing contributes to critical thinking through word choice during text production (Emig, 1977), but others challenge this stance turning to collaborative inquiry (Ackerman 1993; Applebee 1989). However, none have allowed for verbal imitation as a process of acquisition or concept building. Yet, through modeling and mimicking verbal articulations, writers may begin to develop a propitious process. Allowing a learner to imitate creates pathways of understanding that far exceed leading questions. Through the engagement of mimicking, motivation is nurtured. Leading questions often frustrate writers (Flynn & King, 1993). “Once the learner stops and becomes frustrated or loses interest, learning has come to an end” (Rieber, 1997b, p. 202; emphasis mine).

WCs have the potential to affect student learning and student attitudes about writing. This dissertation develops this notion that imitation is not a means of supporting or enhancing cooperation but is essential behavior for learning and persistence. Vygotsky’s constructs of

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4 These terms are synonymous
imitation, ego speech, and the ZPD provide a fundamentally important frame for students of writing. Because learning is social by nature, imitation should allow individuals, specifically writers, “to grow into the intellectual life around them” (Vygotsky, 1978, p. 88). A writer imitating writing and thinking behaviors eventually adapts cognitive behaviors. When this happens in collective activity or with one-on-one guidance, inclination and capability should improve. Utilizing imitation should create higher levels of cooperation, volition, attention (i.e. engagement), and conscious awareness, which are the initiates of higher physiological behaviors.

**Speech: ego and inner.** Any discussion of Vygotsky’s theoretical stances must focus on language, both internal and external articulations. When discussing imitation above, I am referring to verbal imitation, although some gesturing or other behaviors may accompany the talk performance. Talking is especially important when discussing how psychological concepts develop in the individual from external relations.

For Vygotsky, “speech manifests with great persistence and increases whenever the situation becomes more difficult and the goal is not easily attained” (Rieber, 1987, p. 15). Talking plays an important and specific role, one that is “inseparable” and “internally necessary” in achieving a goal. The more “complex, less direct solution” involved in the process of solving, the more important speech becomes (p. 15). Accordingly, ego speech, what Vygotsky terms “primitive verbal thinking,” or thinking out loud, is the transitional stage that ultimately manifests intellect. The external manifestation of the word is being used purposefully. During the acquisition of language, the purposeful external activity of vocalizing is eventually internalized (intramental). As a result, the act of speaking provides initial control of the individual’s conscious awareness. The speaker may not have full command of language, but he or she is not babbling. As well, the speaker may lack a complete or even beginning grasp of the concept/word
at this stage but has begun to see the value in it; through language, the individual gains control over their external and internal environments. When fully developed, ego speech, and the awareness that comes of it, helps with comprehension, solving, or planning.

Vygotsky (1968) observed that the process of mastering ego speech had three definitive behaviors. First, speech emerges to explain intention after the fact/event. Vygotsky gives the example of how a child will draw a picture and, while showing the picture, explain what they drew. (This act of articulation is very much what composition students do during tutorials, office visits, and peer review). Second, articulated speech occurs while the activity is in progress. As the child draws, they state the intended outcome of the drawing and perhaps state their reasons for wanting that outcome. Third, pre-activity articulation occurs with acquired expertise. At this stage, the child states what they will draw prior to drawing it. These three behaviors identify the speaker’s early use of language as a tool that helps control their mental behaviors involving focus and planning. Initially, ego speech functions as a mediator during any purposive activity, especially during a more complex activity and, in so doing, the child eventually shifts the behavior to planning.

These three behaviors are associated with three important factors regarding development of an individual’s intellect:

1. Ego speech works as a tool for mental orientation or as a memory device during language and concept development (i.e. the speaker recalls his or her intention when reviewing the drawing);

2. Ego speech dissipates at the adolescent phase, moving to intra-mental plane or inner voice;
Developing new concepts does not make previous ones obsolete. The new concepts blend with the existing revising the internal mental structure as Flower and Hayes have suggested (Rieber, 1987, p. 8).

**Bandura’s Modeling**

Bandura’s theory of social cognitive modeling is very much like Vygotsky’s theory of language acquisition (Ferrari, Robinson, & Yasnitsky, 2010). However, in his early work, Bandura (1965) resisted the term *imitation*. He claimed that when one mimics, learning does not necessarily occur; instead he defined the act as “differential imitation” (p. 6). He based his position on the physical and social development of subjects he observed, specifically when the observer’s social exposure or motor development may or may not allow for a one-to-one match in response patterns. Bandura’s initial studies focused on developing curative measures to help subjects move beyond restrictive fears and behaviors; Bandura rightly believed that these modifications would come about through modeling, rehearsal, and practice. Much of his scholarship focuses on clinical tests that support a therapeutic protocol for modeling as a way to modify a patient’s cognitive frame or biomechanical processes, processes that require both close physical and linguistic comparison of the model. In contrast, Vygotsky, studied young children and focused on intellect and its development, which he understood as an artificial process reflecting an historical manifestation of social humans. Like Bandura, Vygotsky did not support an equivalent 1:1 matching of behaviors or cognition. Vygotsky believed that full comprehension was a process that took time. Only later did Bandura allow that imitation was indeed part of the process of acquiring language or physical behaviors. Bandura (1989) tells us that infants “selectively imitate,” and parents encourage this, by performing reciprocal “imitations in an exaggerated animated fashion” that by “imitation attentiveness” (compare to Vygotsky’s
volitional attention) develops an “attention arousing value when acts are modeled” (p. 27). Accordingly, the terms *modeling, mimicking, and imitation* should be understood as constructs that furthered both researchers’ understanding of the acquisition process. I turn to Bandura in this section because he devised a successful paradigm for modeling.

Bandura’s modeling provides an accessible protocol for imitation. Early in WC scholarship, Stephen North (1984) identified the nondirective paradigm as a tutoring strategy born of institutional politics; over time, it has become unquestioned orthodoxy. Even with mounting opposition, directive discourse only went so far. To deal with these limitations, North again called for more formal research (1994), research using verifiable measures. For North (and others; see Gillispie, Gillam, Brown, & Stay, 2002), this gap regarding verifiability means that WC work will continue to rely on scholarship that “rationalizes” (Shamoon & Burns, 2001); this scholarship can only respond to trends without proof of effectiveness beyond “bean counting” (Lerner 1997, 2003) to validate “practitioner lore” (Gillam, 2002). Nonetheless, WC s are a natural laboratory for yielding distinctive understandings that help develop student writing (Grimm 2002). Similarly, while Shamoon and Burns (1995) argue in favor of emulative learning as effective, they also acknowledge a lack of grounded research on modeling. Given these two positions on modeling, one suggesting that modeling will always have a passive place in the tradition of writing theory, and one suggesting that modeling may have a far more dynamic and significant place in in WC work, I would like to explore how modeling can be used for and contribute to qualitative/quantitative data collection.

Modeling as learning and or behavior modification comes out of social cognitive theory (Bandura, 1989). Social cognitive theory focuses on the effects, behaviors, and ways thinking imprints, impacts, and leaves lasting impressions with an observer through what is termed
observational learning. In short, people are strongly influenced to behave in particular ways based on the behaviors and thinking of others. Bandura believes that the environment, the personal, and the social all interact and connect causally in what he calls “social determinism.” In other words, anticipations, opinions, emotions, and cognitive competencies convey information that affectively informs observers about intellectual behaviors. Bandura addresses three forms of delivery: direct (formal/intentional) modeling, instruction, and social persuasion. These three means help to create symbolic moments from which the observer may adopt a behavior or knowledge. This theory of modeling aligns with Vygotsky’s claims about language adaptation and the development of higher functions. As models verbalize their thought strategies while engaged in problem-solving activities, their ordinarily tacit thoughts guiding the actions of the models are thus made observable and learnable to others (Bandura, 1989, p. 25; Ferrari, Robinson, & Yasnitsky, 2010).

Bandura notes that a great deal of human thought is linguistically based. Like Vygotsky, he outlines how language acquires symbolic meaning when children interact with mother, family, peers, classmates; Bandura also outlines how this interaction helps lead us to mature behaviors. But because Bandura is a contemporary psychologist who believes that the mind is brain embedded in body, he does not focus on language alone but on the stimulus-response⁵ (or S-R) mechanisms that create causal behaviors of all kinds—physical, emotional, cognitive. The environment, the personal, and the social all interact, creating causal connections, coined social determinism (Bandura 1989), which informs development and behavior. He, like Vygotsky,

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⁵ S-R is a reinforced behavior in which the action performed is somehow rewarded or found pleasurable, encouraging further like responses, causing a change in behavioral patterns resulting in adaptation to the environment.
gives primacy to gesture in our ability to recognize symbolic moments/information: our environment influences us as much as we influence the environment.

Vygotsky was concerned primarily with the internal development of mind through the use of language and with language’s signifying function; as a result, he gave mimicking and imitation prevalence in adaptation/revolution. In contrast, Bandura focuses on the social environment that informs one’s perception. From this perspective, the act of modeling (Bandura 1989) highlights significant moments that can facilitate learning, either reinforcing or altering knowledge, emotional states, and or behaviors. This change may happen immediately or over time with the help of rehearsal and positive reinforcement (as Vygotsky).

This chapter addressed the orthodoxy of writing center theory, introduces Vygotsky’s constructs of ZPD, imitation, and ego voice, and Bandura’s understanding of modeling as a significant contributor in behavioral and psychological change of an individual. Imitation has a long history in instruction and education. Based on this history, I have introduced the notion of imitating verbal articulations of the tutor as having value in the writing process, especially for novice or weak writers.
Chapter 2: Current Research on Learning to Write

Writing as a Process

The writing process first developed by Flower and Hayes (1980a, 1980b) contends that expert writers use writing as a medium for thinking and meaning making and that novice writers do something very much like ego voice (i.e. Vygotsky’s intermental state in which vocalizations are used to direct attention). Their early schema, developed and used to guide further research, found that expert writers

- spend more time planning,
- spend more time monitoring,
- exhibit a higher vocabulary (and or content knowledge),
- are more apt to shift to reader based prose,
- use writing to make meaning (discovery),
- apply more rhetorical strategies throughout development.

In contrast, weak writers spend more time focused on surface level errors and mechanics, thereby producing writer-based prose rather than advancing to reader-based prose. In essence, novice writers are unable to break down the task of writing into manageable parts, meeting the goal (rhetorical prompt, exigency), nor do they understand meaning making as part of the task of writing.

Acknowledging that writer-based prose has a place in the graphic layout devised, Flower and Hayes (1979) suggest that writing instructors should break down the writing task for novices for better manageability. The implication of this stance is that mature writing processes develop not from imitation or modeling, as it does in language acquisition, but from an innate source.
within the writer. Therefore, Flower and Hayes suggest that given enough writing tasks, broken down into step-by-step procedures, “writers would receive a greater degree of self-conscious control over abilities they already have and a more precise introduction to some skills they may yet develop” (p. 37). This stance seems very much like McAndrew & Reigstad’s (2001) rationale for leading questions in which learners are guided to discovery of the answer within themselves. However, for learning to take place, questions that surely arise must be answered prior to progressing (Flynn & King, 1993). Taxed by more leading questions, or left to their own devices, learning writers surely experiences an undue amount of cognitive strain and frustration. In an instructional setting, where the stakes are high, learners understand that the questioner/teacher knows the answers (or the process) but appears to be withholding them (it); as a result, this perception limits the learner’s continued participation, which, in turn, surely must impact and restrict a writer’s sense of efficacy and, by extension, cognitive development. This kind of frustration could limit the learner’s ZPD. At the very least, the practice of leading questions sans modeling how to think stultifies, if not halts, inquiry and the cooperative process necessary for learning.

Modeling and imitation has been studied prior to this dissertation. In an earlier study of WC work, Harris (1983) asked a weak writer to model his writing process, both the physical act and his thinking process by writing and articulating out loud. Harris then modeled for the writer the cognitive behaviors an expert writer would perform while writing. Rather than explain, Harris modeled her expert writing behavior by patterning Flower and Hayes’s (1977; 1980; 1981a; 1981b; 1986) notions of expert writer cognitive strategies. Harris (1980) was successful with this method of tutelage but remained wary of it as a viable approach. “Despite the obvious success of this one case, we need to be very cautious about the implications. Neither verbal
protocols nor modeling, or even a combination of both, can be said to be tools of absolute value” (p. 79). Nevertheless, working from Flower and Hayes’s contention that weak writers are at a stage very much like what Vygotsky identified as ego-voice, Harris successfully modeled the process for students by articulating her next steps while writing.

Zimmerman and Risemberg’s research (1997) supported Harris’s tactic for changing the writer’s behaviors, noting that young writers reflectively ask themselves questions about text they have written. They suggested that writing is a behavior, a form of self-regulation involving self-verbalization. This kind of speech helps the writer self-direct, which facilitates goal-oriented behaviors and helps writers self-correct more often. Having the tutor speak out loud may provide a new approach to tutoring and writing instruction. WC tutors and their writers can model by self-reporting their cognitive behaviors during writing or while reading another’s draft. None of this is unlike what writers currently do in WC tutorials. During the initial reading of a text in the tutorial, writers often stop (unsolicited by the tutor) to explain passages, offering explanations quite different from what the actual text appears to state. This behavior suggests that the students can analyze, plan, and associate although the students perhaps do not utilize these as strategies during text development when working alone.

**Peer Review as a Process**

Peer review is a key constituent in writing instruction. Yet, peer review is problematic in the classroom because students lack additional information and training. Research has suggested other reasons for the lack of quality feedback: students may find the experience of critiquing too emotional or sensitive (Nilson, 2003). As a result, the instructor imposes constraints that limit student focus to specific parts of the paper or specific aspects of the writing assignment. Kaufman and Schunn (2010) suggest that peer review fails from lack of trust; the writer’s
perception is that peers do not have enough expertise to make informed decisions about next steps for revision. Other research (Cho & Cho, 2011) has found that from peer-review sessions, students gain a sense of audience awareness, yet they are still unable to move away from local writing concerns to address global writing concerns. Cho and Cho suggest this focus issue may indicate that the local issues are the only kind of practical writing knowledge students are able to perform. It seems that students with sufficient knowledge for repairing surface-level errors do not know how to address global concerns.

Supporting Cho and Cho (2011), Nelson (2009) posits that developing the ability to perform global revision and acquiring the language needed to address such writing issues are metacognitive skills that can be taught. To test this premise, researchers modeled thinking out loud for students to teach those learners the mental habits of mindfulness necessary for critical feedback. Their conclusion was that the verbal articulation they modeled seemed a key activity contributing to writing improvement.

Di Pardo and Washerman-Freedman’s study (1998) support talking out loud as a kind of modeling. Pulling from Vygotsky’s stance that language behaviors are learned processes, Di Pardo and Wasserman make a clear connection between speaking about writing and writing improvement: “[T]alk has a role in the writing process, but when it’s restricted by narrow guidelines, it becomes a task of pleasing the teacher, not discovery of possible meaning” (p. 143). Talking about writing, especially focusing on global issues rather than surface-level concerns, may very well contribute to increased writing ability by showing weak writers how to strategize and plan the next steps in their writing process.
Problem of peer review. Like most teachers of composition, I have found myself in my office complaining about the lack of engagement my students exhibit during peer review. I have distributed worksheets, given instructions, modeled criteria, and sat one-on-one with students to teach them the value of peer review. None of this has worked. After peer review, student drafts still lack clear content, development, and insight. Flower and Hayes’s (1979) early work on the cognitive strategies writers use told us that writers are guided by different intentions during writing events, depending on their level of ability. More able writers were more likely to use writing to facilitate thinking by associating with the text they produced, while less able writers employed efforts much like ego voice (cf. Vygotsky). The implication was that weak writers did not have an investment in the text they were producing; as a result, these latter writers left underdeveloped ideas in their texts. The use of ego voice was seen as a detriment. The weaker writers in these studies were also preoccupied with mechanics and the physical state of the text, which is referred to as writer-based prose (Flower and Hayes 1977; 1979; 1980; 1980a). Such efforts allowed less able writers to understand that writing is “a multistage process” that involves “a degree of self-conscious control over abilities they already have and a more precise introduction to some skills they might yet develop” (1980, p. 37; emphasis mine). In other words, strong writing is “immanently teachable” (1980, p. 31). By implication, weak writers arrive at a satisfactory level of proficiency if given enough time, enough writing assignments that are from facile to complicated, and enough opportunity to exhaust all wrong guesses, leaving only correct guesses regarding what to communicate to the audience.

But no matter how much I broke the task down into smaller, manageable steps as Flower and Hayes suggested, my student’s writing improved little and the interaction between students
was still minimal. Students were not enjoining in peer review. It was not a collaborative activity conducive to developing writing.

Another peer review study (Becker 2006, p. 35) found expert writers were more likely to employ serious planning strategies because their memory capacity was more developed. On the one hand, this focused attention allowed expert writers to draft without being cognitively taxed. On the other hand, weak writers had minimal skill in planning and translating ideas into words, problems that overburdened short-term and long-term memory. Becker’s research suggests that writing is a mixture of implicit and explicit instruction that can be used for developing various cognitive skills (p. 47). These skills develop from audience awareness; “[C]ommentary from a number of peers, especially when written down, helps writers gain a broader perspective of how different readers react to drafting strategies” (p. 47). But, this happens only when feedback is constructive. Just as in Flower and Hayes’s studies, Becker does not explain how novice writers might inform novice writers.

If students by and large understand peer review in this way, then the act of peer review is doubly confusing, as it were, to novice writers: they cannot fix their own papers but are responsible for fixing a peer’s. That is, they cannot express their own thinking but are expected to help their peers do so. Worksheets used to guide students through the process of peer review provide prompts on surface-level error and content questions to engender focused higher-level thinking when providing feedback (Nilsen, 2003). This practice sends a paradoxical message to students and suggests in part why many students offer perfunctory answers (Min, 2005). Flower (1998) believes these limited answers represent contextualized criteria in which worksheets demand a response to “set standards for student’s response to writing” (p. 288). Instructed to be thorough, students often write answers aimed at fulfilling teacher expectations rather than
providing helpful advice about how to develop a passage or focus the paper (DiPardo & Freedman, 1998); or worse, instructors assume that intellectually motivating words like analyze, interpret, and paraphrase describe already -earned abilities (Flower, 1989, p. 288). Just as important, students often do not read their peers’ feedback because having “other students read [their] writing makes [them] nervous” (Appendix A, #10); so, presumably, they fear the response to their poor efforts. Lack of expertise influences the level of trust between student peer reviewers (George, 1984). Reading rough drafts is a complicated task even for expert teachers (George, 1984). Unfortunately, the student responder likely knows little more than the student author, who believes by implication that she cannot develop her own paper. Teaching students how to do peer review becomes a necessary part of writing instruction.

Rather than teach peer review, many instructors rely on peer-review worksheets. Primarily, the worksheets are problematic because they ask students to write rather than talk with each other (Freedman, 1992). Instructors who feel the sheets are successful, believe that cognitive behaviors are developed (Freedman, 1992; Graff, 2009; Kinsler, 1990), but it is more likely that the improvement can been seen in the respondents, not necessarily with the writer. It is important to note that research has shown that if and when students acquire a heightened cognitive awareness of texts, they prefer to talk rather than fill out worksheets (Kinsler, 1990). Even so, putting the onus on the reader to enable the author’s meaning makes the writer dependent on the reader. The worksheets that ask for reader-directed feedback deprive the writer of the discovery and word play that lead to deliberate meaning making (Vygotsky, 1987, p. 52; Rieber, 1997, p. 24).

Intrinsic to the peer-review process is the reader functioning as external audience, positively contributing to the writer’s developing content, yet such a concerted focus on audience
seems premature at this stage of the writing process. Writers who are asked to write about their understanding of a topic lose some authority in this process. Peer review should be an opportunity for authors to discuss their intended meanings, not to address the readers’ expectations. The conversational exchange in a peer review might better be served if the author was the primary, dominant speaker; thereby, the session would facilitate the goal-directed cognitive behaviors of planning, organizing, or analysis (Flower, 1989), all of which may contribute to a higher conceptual awareness of meaning making.

In this chapter I have discussed the disparity between writing theory and writing practice as it applies to peer review as key component in revision. The issues surrounding writing and peer review might benefit from modeling and imitation. Bandura’s notion of modeling shares characteristics with Vygotsky’s notion of imitation, but Bandura provides a methodological frame for modeling and self-regulation that assures movement from dependent to independent learning. As such, Bandura is quite appropriate for my study. Because I am concerned with WC work, specifically the tutor dyad, I would like the tutorial to involve more than an ad hoc strategy and a feel-good moment (Thonus, 2001); the tutor dyad should function systematically without compromising individual proclivities. Bandura says that intentional instruction or guided instruction (this could mean scaffolding or close observation and intervention) coupled with modeling and rehearsal/mimicking can effectively convey abstract rules of reasoning to students that will contribute to their cognitive development as it pertains to writing (Bandura & Adams, 1977). This structured approach appeals to me because WCs deal in higher-order concerns (i.e. focus, rhetorical goals, development, organization), yet tutors are often left to their own, many times tacit, understanding of what steps to inform the writer about to enhance writing. I want to examine how we might convey these ways of thinking and understanding when we interact with
writers and their texts, without restricting or controlling performance (Rose, 1988). I would also
like to introduce modeling as a stable platform for pedagogy, assessment, and research. Given
the misunderstanding of the ZPD and the gap in the current practices of imitation and modeling
in WC work and writing in general, my study will be guided by the following research questions:

1. Can modeling and imitation increase student ability to respond/discuss paper
development with a peer writer?
2. Would students gain a sense of mastery necessary for this kind of collaborative
work?
3. Would students enjoin in the peer-review process for future writing tasks?
Chapter 3: Methodology

Vygotsky’s, Bandura’s, Flower and Hayes’s, and Zimmerman and Risemberg’s studies acknowledge that learners articulate during complicated tasks such as writing; what Vygotsky theorized as ego speech is a necessary tool for planning and goal development. By allowing an expert writer to verbally express their thought processes during critical reading, I hope to understand whether this alliance between speaking and writing might contribute directly to improved cognitive skills and the writing behaviors of novice writers. This study gathers quantitative data and analyzes them based on Vygotskian notions of imitation and cooperation, that is, engagement in an activity with another or others. Bandura’s research using guided instruction and systematic modeling suggests that by conveying abstract rules of reasoning, cognitive development can be effectively accelerated (Bandura, 1986).

Numerical data generated relies on Bandura’s research on modeling and self-efficacy surveys. Qualitative data generated comes from direct or indirect testimony of students participating in this study.

Self-Efficacy Surveys

Self-efficacy (SE) has been identified as an important factor in social settings in which performances are judged, such as school, work, and the arts. SE is not self-esteem (Bandura 1967; 1977; 1980; 1983; 1990; 1994; 1996; 1998; 2003; 2006) but refers to an individual’s preconceived notion about their ability to perform at a certain, identified level and to maintain that performance or exceed it in future performances. A person holds positive and or negative standards before, during, and after a task; these standards influence future decisions and outcomes about how well they will do on the task—whether they will complete or even start the
task. How a person perceives their ability directly impacts performance and outcomes regardless of aptitude. SE has four interdependent main sources:

- actual experience—mastery,
- vicarious experience—observation,
- social persuasion—positive/negative, external/internal, direct/indirect feedback;
- emotional states—level of fear, lack of sleep, heartbreak, grief, and so forth.

(Bandura, 1989)

When a person’s ability does not match up with their thoughts about performing the task, cognitive incongruity results and affects the individual’s state of being (Bandura, 1990).

Cognitive incongruity may be either positive or negative (wow, I did better/worse than I thought I would) and may also depend on the specific way in which the individual framed the event mentally. For example, a student who has a strong dislike for math is tasked with solving a math word problem. This student may look at the problem, make an attempt to solve, become frustrated, stop, wad the paper up and throw it, never finishing. On a different day, the student who hates math but loves puzzles is asked to solve a puzzle. The same word problem is given to the student who then works toward finding a solution for the problem, fully engaged until the problem is solved.

As the example demonstrates, mental framing affects cognitive behavior. Of the two instances compared, the first scenario is an example of developing low SE. Low SE can become the dominant mindset when the event outcome is consistently misaligned with likely ability. In contrast, the second scenario illustrates high SE developing, especially when the task outcome is consistently positive. An individual’s SE can be effected when performance is compared to
another’s. Of note, SE can be changed either deliberately by the learner or by another person (teacher/tutor).

The ability to modify another’s preconceived beliefs or ability can alter performance outcomes. This kind of cognitive framing, or reframing, as it were, involves contemplating these questions: What do I know now? What are the rules? What are the strategies? What is my reason for doing this? What kind of reward or validation do I get from successfully completing the task? Thus, motivation is a highly complex, important state in altering behavior that comprises

- attributions—how one justifies outcomes—my fault, your fault, bad learning experience, lack of innate ability (these can be positive as well);
- outcome probabilities—one’s beliefs in the rewards or restrictions of the activity—becoming famous, receiving an A, going to prison;
- goals—self-generated and flexible, especially if one has the ability to see the task in smaller parts and not let one small goal that went bad disrupt the whole activity;
- affects – how one copes is a result of how the event is framed;
- reflections—one’s ability to look back and critically examine actions and outcomes.

Perception of ability determines the activities, the effort, and the tenacity an individual invests in a task. The stronger a person perceives capability, the more active the coping efforts—ergo, the stronger that individual’s persistence to complete. Clearly, the way in which a person perceives their ability impacts their motivation and the quality of performance. This perception becomes even more important in high-stakes settings such as peer review conducted in a first-year composition class.

In a learning environment, SE is not enough, nor is modeling. But together, paired with feedback and practice, SE and modeling can precipitate mastery outcomes: “Applications based
on performance accomplishments through the aid of participant modeling produce higher, stronger, and more generalized expectations of personal efficacy than do vicarious experiences alone” (Bandura, 1997, p. 288; Bandura & Zimmerman, 1994). To know if modeling may impact a learning event, efficacy scales provide an opportunity to identify a base mark; from these I can compare any increased sense of efficacy.

As is already clear, this study used pre- and post-efficacy surveys to track the effectiveness of modeled cognitive behavior during peer review. Pajares and Johnson (1994) measured writing efficacy with students who had general high self-efficacy but did not feel successful in writing events, even with appropriate skills for producing text. Their findings support that a high sense of efficacy is not sufficient to increase or improve writing behaviors. Affecting existing behaviors requires feedback and appropriate interventions. When these are present, SE becomes internalized in a synthesis of consistent practice, self-evaluation, guidance, and repeated learned practice. To implement an intervention strategy that would increase beliefs and abilities of cognitive writing behaviors, it is necessary to measure first, then model. When necessary, moreover, providing time for discrepancy reduction through self-regulation of practice with additional guided intervention assures successful change in peer-review practices and WC pedagogy (Bandura, 1990).

Bandura’s (2006) standardized methodology for measuring self-efficacy relies on individuals to self-identify their ability to perform specific tasks (p. 312). Subjects are asked to rate the strength of their performance beliefs and their ability to complete the requisite activities. The parameters of the survey tool require that questions are phrased in terms of “can do” rather than “will do” (309). The term will suggests intention whereas the term can suggests current and future strength of ability (Bandura, 2006; Schmidt & Alexander, 2013). Additional language may
appeal to the affective domain of performance. The survey developed for this study consisted of both affective and effective questions developed collaboratively with the class instructor. The instructor and I drew up a list of abilities to ask students about regarding peer review. We decided that we also wanted to understand whether a student’s affective domain for peer review (Levyhk 2008; Pajares, Johnson, & Usher, 2007) was a factor in performance as well. The college’s internal research department drafted the final tool.

Participants

This small exploratory study was done at a two-year college in a high-income suburb on the outskirts of the Kansas City metro area. Students at this college identify as predominantly white (72%) with Hispanic (8%) and African American (6%) being the next two largest ethnicities of the remaining population. The average age of students enrolled in 2013 was 26 years with 54% of the population identifying as female.

Procedure

This study was conducted in a natural classroom setting. I solicited to first-year English composition faculty. After explaining the goals of the study and the time involved, one member volunteered her classroom. On the first day of class, the instructor explained to the students the goal of my study, making clear that at any time any student could opt out of the study without penalty. My data then came from a convenient sample of first-year composition students (n=33). Students were given the option to not contribute to the study at any point during the semester without penalty by omitting their student IDs on the pre or the post surveys or not attending the focus group. Those who did not participate were unknown to the researcher, the instructor, or fellow classmates. All students received the peer-review treatment as peer review was a part of
the teacher’s curriculum. Materials used in this study were comprised of class writings, self-efficacy surveys, and informal interviews.

The first week of class, students were given an in-class writing assignment that asked what peer review and peer workshops meant to them. No other parameters were given for the writing, such as length. The twenty-one attending students were given five minutes to respond to this question (see Appendix A). During the second week of classes, writers were administered a pretreatment SE survey (see Appendix B) to establish current SE for peer review. The SE survey was developed in collaboration with the instructor. The application, which involved three experienced tutors, was a variation on Graff’s study in which students were taught think-aloud protocols for critical thinking in peer reviews (2009, p. 82). Prior to application, each tutor was directed to model their thinking process while they diagnosed and reviewed a participating student’s volunteered written draft. Each tutor was briefly reminded to focus on higher-order concerns before addressing lower-order concerns (Reigstad, 2000, p. 43–56) as they had been trained to do for a regular session. By focusing on higher-order concerns, such as thesis/focus, development/proof/support, or organization, the tutor helps the writer create more meaningful text. Usually improvements in these areas change the paper so much that any discussion on surface-level error becomes insignificant. Application consisted of only one tutor sitting at the front of the classroom next to a student volunteer. The other two tutors waited outside the classroom. The volunteered essay was projected on the large screen for all students to read along. The student read their paper out loud while the class read along. After the reading, the tutor then addressed organization, focus, logic, and support as the class observed. The next two tutors presented the same format with the same paper.
After application, the class was given the opportunity to discuss what they observed, identifying similarities or differences vis-à-vis their own experience. The instructor affirmed or disagreed with students’ interpretations. After discussion, a different student volunteered their paper, which was projected on the large screen as the author read aloud. The class was asked to then comment on the paper, imitating the tutors’ strategies. The instructor and I corrected mismatches or reinforced correct commenting. After group application, writers were directed to break into pairs with instructions to continue imitating this behavior while responding to their partner’s draft. Enactment by response modeling and iteration of the process over time is required because “exposure to modeling as stimuli does not provide the sufficient conditions for imitative or observational learning” (Bandura 1965, p. 593). This protocol was based on Bandura’s constituents of modeling.

**Treatment: Modeling and Imitation**

Bandura’s research (1989; Bandura & Zimmerman, 1994) focused on behavioral proclivities or restrictions and on how to help individuals move beyond their writing difficulties. Findings indicated that intentionally modeling thought strategies in a formal setting made “covert thoughts that guide the action overt, significant, understandable, repeatable, and thus learnable” (p. 25). However, when more complicated patterns of behaviors, such as mastery of cognitive behaviors, were involved, stimulation of four subprocesses had to be engaged to ensure positive outcomes:

1. **Attentional processing**—the instructor must have the attention of the learner. In this study, the context in which writers observe and tutors model should carry enough weight to mark the observed behavior as significant, which is, according to Vygotsky, a key component for imitative practices.
For assurance, a short introduction of goal, procedure, and logic driving the application was given to the class by the instructor and me.

2. **Representational processing**—class discussion provided the learner time to convert the content observed into meaningful, identifiable associations. Repetition facilitated retention and recall ability (this can be understood as imitation/modeling at the group level as well).

After tutor’s modeled cognitive behaviors, writers were asked to identify differences in their own behaviors and to clarify why they might be significant. Carried out in a large group, the opportunity to correct mismatches provided time for cognitive reassignment of perceived outcomes while lessening pressure to be correct for each participant. The example provided at the group level ideally influenced the individual to give up old behavior.

3. **Production processing**—this stage required students to begin to self-monitor by comparing and correcting old behavior so it would align with the modeled behavior. Once students had articulated significant differences and likenesses occurring in peer review at the group level, they practiced new behaviors. After an out-loud reading of the second volunteered paper, writers were invited to imitate the verbal behaviors observed by the tutors when making practical comments for subsequent revisions. Guided intervention was provided when necessary to continue correcting mismatches while positively reinforcing matches.

4. **Motivational processing**—an activity that has been correctly performed and effectively reinforced is the strongest predictor of future behavior (Bandura, 1980; 1990, p 355).

Given these guided steps, students should have experienced a level of performance success by the time they worked in dyads. This last stage is most important: without a sense of achievement,
the functional value of the task is lost, which negatively impacts the learner’s efficacy. Allowing writers to practice in a large group and move to pairs instantiates new cognitive behaviors.

As indicated, the fourth stage is perhaps the most important since motivation has the strongest impact on efficacy and self-regulated learning (Bandura, 1980, p. 29). Equally, Vygotsky understands this last step as the one in which the imitator moves toward doing without the assistance of a more capable person. Where the novice was once convinced that the outcome would have a negative impact on affect, that individual now has positive expectations and the practice is seen as an incentive.

This study operationalized these four subprocesses as necessary parts of the application. My hope was that by providing clear instruction about what to anticipate, retain, and potentially rehearse during observed behaviors (Brown & Barclay ctd. in Bandura, 1989), students would acquire an understanding of how to do peer review. Moreover, by observing models and imitating, learners would discover what thinking strategies were worth coding, ordering, and processing (Lamal; Rosenthal & Zimmerman ctd. in Bandura, 1989). Finally students would feel better prepared to respond to the demands of peer review.

At the end of the semester, after writing five papers and imitating peer review protocols for each, the students were given a post-application SE survey two weeks prior to the end of classes. During finals, students were given an in-class, timed writing comprising six questions (see Appendix C). Students were required to answer question one but could respond to any two of the remaining 5 questions. Responses to question #2 were collected for data analysis. The week after classes were over, an informal interview (see Appendix D) with participants was conducted to clarify or correct interpretation of data and provide participants an opportunity to contribute additional information not captured in the SE questions or in-class writings.
The data generated from this convenient sample was cleared by the Kent State University’s Internal Review Board and by the participating two-year college’s internal review committee. The following is a summary of the steps used:

1. in-class writing on understanding of peer review;
2. administration of pre-self-efficacy survey to composition students;
3. at the drafting stage of the first writing project, ask two student writers to volunteer their work about one week before in class peer review;
4. choose one of the submissions;
5. make three copies;
6. distribute copy of essay to each tutor, who then reads the draft, independent of each other;
7. tutors write feedback notes on student’s draft or separate paper (what they would address in the essay if it were a real tutoring session);
8. remind tutors to stay focused on HOCs.
9. day of class:
   • put first essay up on large screen;
   • encircle writer with classmates, center of room
      • so that everyone can see/hear
      • to make highly visible the physical language of the discussion;
   • invite one tutor to sit with the author of the essay and
      • do introductions,
      • have student read paper aloud while class reads along;
   • comment (tutor does this) according to HOCs, modeling thought process—where the paper successfully made connections, support, logical moves, and what the paper lacked.
      • let writer respond to feedback, ask questions,
      • tutor verifies writer’s intention for next draft or corrects mismatching;
   • ask class for follow up questions for tutor;
   • excuse tutor from room;
   • repeat process with tutor #2;
   • repeat process with tutor #3;
   • excuse tutor from room;
   • hold class discussion: ask the writer how they feel about the feedback (will they follow the advice? [representational process, motivational, productional]);
   • ask the class what they noticed about the focus of the feedback during the sessions and allow time for explanation and discussion (representational process, chance to correct mismatches);
   • put second volunteered essay on projector;
   • have writer read draft to whole class (attentional process repeated, rehearsal);
   • direct class to model feedback style of tutors (representational, productional, motivational);
   • correct mismatches or off-topic comments;
• ask class to have their drafts ready;
• break out into pairs and repeat process in sets of two or three (attentional, representational, productional, and motivational; moving toward independence);

10. administer post self-efficacy survey at the end of the semester;
11. administer in-class writing regarding peer review practice (changes/what was learned) finals week;
12. hold informal interview with students to share and discuss interpretation of data and students’ reflection on the process after semester ends.

The protocol format above provides a reproducible procedural framework to reliably execute for future data collection of an intervention like this.

This chapter provided background scholarship on peer review and writing behaviors of proficient and weak writers. Peer-review students behave similarly to students who participate in one-on-one tutorials; students of either group readily accept feedback with little questioning or inclination to talk about their intentions for their writing. Contrastively, weak writers are more inclined to (self) talk during text production, whereas proficient writers are less inclined to vocalize, which creates an interesting dichotomy of behavior. I introduced Bandura’s four constituents needed for modeling protocols, and I provided an outline of the protocols used in this study’s peer-review intervention.
Chapter 4: Results and Analysis

Based on the methodology described in the previous chapter, this chapter presents results by identifying the sample group used, addressing the goal of the SE tool, providing a detailed table of pre and post responses, and aligning specific questions with individual tables of the SE questions that resulted in significant movement after post response.

Participant Sample

Students were asked to provide student IDs to cross-match pre and post surveys. Thirty-five students enrolled in the class were administered the pre survey; of those, thirty-three students provided ID numbers. At the end of the semester, thirty students remained in the class. Of those students, twenty-nine provided correct ID numbers on the post survey. The participants formed a convenient sample representative of the college population’s academic demographic at the time of the study. Students’ grades aligned with the larger population. Participants’ academic ability was above average.

Table 1: Enrolled Fall 2013 term GPA stats

<table>
<thead>
<tr>
<th></th>
<th>Composition Class</th>
<th>Student Body (Excludes High-School Students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.42</td>
<td>2.75</td>
</tr>
<tr>
<td>Mode</td>
<td>3.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Minimum</td>
<td>3.00</td>
<td>0.00</td>
</tr>
<tr>
<td>First Quartile</td>
<td>3.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Median</td>
<td>3.33</td>
<td>3.00</td>
</tr>
<tr>
<td>Third Quartile</td>
<td>4.00</td>
<td>3.79</td>
</tr>
<tr>
<td>Maximum</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.43</td>
<td>1.21</td>
</tr>
<tr>
<td>n</td>
<td>24</td>
<td>14991</td>
</tr>
</tbody>
</table>
From the twenty-nine remaining students, twenty-four matched for comparison (see Appendices E, F, G, and H) for raw data, paired response, and bar charts. The reason they were above average is because these students came to college ready for composition coursework. About 40% of the college population tests into developmental courses.

**SE Survey Scaling**

This study sought to determine students’ attitudes about performing peer-review based on their assessment of peer-review elements they judged themselves capable of performing. Accordingly, the scale’s goal was to capture participants’ judgment of their performance or thinking capability (Bandura, 2006). Meeting this goal required domain-specific questions linked to behavioral factors in a graduated format.

The scale was developed following the guidelines on the self-efficacy scale construction and response format suggested by Bandura (2001). All items were positively oriented, using “I can” statements, except the first nine questions, which asked students how they felt about peer review. Given that past experience is a strong indicator for future performance, my goal was to understand participants’ affective stance on the task before understanding their perceived capability. All items utilized a five-point response format (no/never, yes/always) regarding agreement with statements.

Survey questions consisted of 19 questions concerning peer review. The first question seeks to understand participants’ affective state for peer review (for example, love). The next two questions isolate the two main parts of peer review, reading and critiquing drafts. The next two questions ask participants whether they or their peers follow the advice provided. Then, two questions attempt to identify participants’ trust in peer review: do they seek a peer who might be a possible stranger or do they seek out someone who knows them well? The last question seeks
to understand where the participant learned peer review. These questions were framed in such a way as to identify the emotional state of the participants during peer review. The emotional state informs the psychological state and thereby the level of participation (Bandura 1989; Levyhk 2008; Pajares, Johnson, & Usher, 2007).

The second set of questions involves SE questions. The questions are domain specific “I can” statements, identifying aspects of the peer-review process and elements necessary for developing strong writing. Two questions focus on a writer’s ability to address surface-level errors (questions 9a and g). Five questions address the writer’s ability to identify and discuss organization (9b), description (9e), a paper’s focus (9c), and the use of quotes as support (9f).

Questions were framed to capture both affective and skills-based behaviors and knowledge of the peer-review process (see Appendix B). Possible responses spanned a 5-point scale with No/Never accounting for 1 point to Yes/Always accounting for 5 points. Much research addresses the probity of Likert scales versus a traditional 100-point span. Bandura (2006, p. 312), Parjares and Johnson (1994), Pajares (2003), Schmidt and Alexander (2013), and Jones (2008) warn against using Likert in place of the traditional 0 to 100 span, reasoning that respondents tend not to choose extremes, causing a loss in variance. However, other studies found that using a Likert 5-point scale had no discernable variation in reliability or validity for measuring results (Jacoby & Mateli, 1971; Maurer and Peirce, 1998; Wakely, DeKruif, & Swartz, 2003). Some studies (see Schunk, 1981) have deviated from the traditional gradient scale model by starting at 10 points and moving up to 100 points but using descriptors of not sure, maybe, pretty sure, and real sure, which ultimately replicates a five-point scale. One study (Sherer & Maddux, 1982) attempted to create a standardized, non-domain-specific Likert scale with a span of 14 points with descriptors of strongly agree to strongly disagree to assess SE;
again, this effort seemingly replicated a more simple Likert. Based on the literature and the limited time line I had for administering this survey, given the ease and familiarity of Likert surveys, and assuming that students were less inclined to pause and reflect fully given the minimal in-class time provided, I chose a 5-point scale.

**Hypotheses**

To process and format data, I used *Introduction to Statistical Investigations* (preliminary copy, 2014) by Tintle, L. Chance, Cobb, Rossman, Roy, Swanson, VanderStoep, an online resource provided by Wiley Corp. Originally, I had hoped to establish a correlation between skills and affect; however, after initial data collection and an attempt at a correlational analysis, I found that these two could not be reliably assessed. Analysis, therefore, consisted of pre and post data to see if modeling and the opportunity to imitate observed behaviors seemed to impact writer’s attitudes about and ability to do peer review.

Because my sample size was small, I used a two-tailed t-test to find if a statistical significance existed between pre and post treatments. My hypothesis was that no change would occur in respondents’ answers regarding their affective state or their perceived ability to participate in peer review post treatment. My null hypothesis was that the students’ affective state and perception of self-efficacy would not change.

$$H_0 : \mu_\Delta = 0$$
$$H_a : \mu_\Delta \neq 0$$

The formula for the t-value is $t = \frac{\bar{x} - \mu_0}{s/\sqrt{n}}$ and the degree of freedom is $(df) = n - 1$, where $n = 24$.

The formula for the p-value was $2 \cdot \text{P}(z \geq |z_\Delta| | H_0 \text{ is true})$.

After averaging scores, determining for standard deviation, and implementing a matched t-test with a probability of .10, I found that 7 of the 19 questions showed significant movement.
after treatment: questions 1, 2, 4, and 6 regarding affective state with questions 9a, 9b, 9e, and 9h regarding SE. Questions 3 and 7 approached significance.

Table 2: Survey affective questions

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Q7</th>
<th>Q8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>0.7083</td>
<td>0.4583</td>
<td>0.375</td>
<td>0.4583</td>
<td>-0.208</td>
<td>0.75</td>
<td>-0.375</td>
<td>0.375</td>
</tr>
<tr>
<td>Std dev</td>
<td>1.1221</td>
<td>1.2151</td>
<td>1.0959</td>
<td>0.7211</td>
<td>1.0624</td>
<td>1.4219</td>
<td>1.1726</td>
<td>1.0959</td>
</tr>
<tr>
<td>Mode</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Min</td>
<td>-2</td>
<td>-1</td>
<td>-2</td>
<td>-1</td>
<td>-2</td>
<td>-2</td>
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<td>-2</td>
</tr>
<tr>
<td>Quartile1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-1</td>
<td>0</td>
<td>-1</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>Median (Q2):</td>
<td>1</td>
<td>0</td>
<td>0.5</td>
<td>0.5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Quartile3</td>
<td>1.25</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.25</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Max</td>
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<td>2</td>
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<tr>
<td>IQR</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1.25</td>
<td>2</td>
<td>1</td>
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<tr>
<td>p-value t-test</td>
<td>0.0051</td>
<td>0.0775</td>
<td>0.1072</td>
<td>0.0049</td>
<td>0.3467</td>
<td>0.0166</td>
<td>0.1308</td>
<td>0.1072</td>
</tr>
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</table>

Table 3: SE Questions showing quantitative movement in post treatment responses compared to pretreatment.

<table>
<thead>
<tr>
<th></th>
<th>Q9a</th>
<th>Q9b</th>
<th>Q9c</th>
<th>Q9d</th>
<th>Q9e</th>
<th>Q9f</th>
<th>Q9g</th>
<th>Q9h</th>
<th>Q9i</th>
<th>Q9j</th>
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<tbody>
<tr>
<td>Average</td>
<td>0.4583</td>
<td>0.7917</td>
<td>0.3333</td>
<td>0.1667</td>
<td>0.125</td>
<td>-0.167</td>
<td>0.1667</td>
<td>-0.417</td>
<td>0.25</td>
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<tr>
<td>Std dev</td>
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<td>1.0347</td>
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<td>1.1293</td>
<td>1.018</td>
<td>1.0734</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
<td>-1</td>
<td>1</td>
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</tr>
<tr>
<td>Min</td>
<td>-1</td>
<td>-1</td>
<td>-2</td>
<td>-2</td>
<td>-2</td>
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<td>-3</td>
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<tr>
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<td>1.25</td>
<td>1.25</td>
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<tr>
<td>IQR</td>
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<td>1.25</td>
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<td>0.0568</td>
<td>0.2656</td>
<td>0.89</td>
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</tr>
</tbody>
</table>

During the following results and analysis section, I address some responses not as negative or neutral but as positive. I realize that respondents falling into the category of some may be just as inclined not to feel positively toward peer-review activity; but I strongly suspect that enough positive experiences kept the participant from answering negatively, rarely or never, and so counted some as a positive descriptor. In what follows, I provide the results moving numerically through questions having significant movement after treatment.

Analysis of Responses

**First question: I love peer review.** The majority of students did not feel negatively about peer review prior to treatment. Pretreatment, 21% of participants responded negatively to the question, with 8% reporting never, 12.5% reporting rarely. Seventy-nine percent reported
feeling positive toward peer review, with 50% of respondents identifying as loving peer review some. Twenty-five percent reported frequently with 4% claiming always loving peer review.

**Table 4: Question 1: I love peer review**

<table>
<thead>
<tr>
<th>Response</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td>No/Never (1)</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Rarely (2)</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Some (3)</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Frequently (4)</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Always (5)</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

N=24 24 24

Post treatment, only 4% reported feeling negatively about loving peer review, with 0% reporting never and only 4% reporting rarely. Those reporting loving peer review some shifted from 50% to 37.5%. Those who frequently love peer review increased to 37.5%, and 21% now reported loving peer review always. In summary, 21% of pretreatment participants felt negatively toward peer review, and 79% felt positively. After treatment, only 4% reported feeling negatively toward peer review, with 96% reporting positively. Analysis showed that 9 participants did not shift their judgment about this question. Two moved negatively. Thirteen moved positively. Probability for this result came in at .0051.

**Question 2: I enjoy reading other’s papers and providing feedback.** Pretreatment, 20% of respondents reported negatively to enjoying reading and providing feedback, with 4% reporting no and 16% reporting rarely. Thirty percent reported enjoying reading and providing feedback some. Forty-two percent reported frequently, with 8% reporting always.

**Table 5: Question 2: I enjoy reading other’s papers and providing feedback**

<table>
<thead>
<tr>
<th>Response</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td>No-Never (1)</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Rarely (2)</td>
<td>4</td>
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<tr>
<td>Some (3)</td>
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<td>10</td>
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<tr>
<td>Frequently (4)</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Always (5)</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

N=24 24 24
Posttreatment findings show that 0% never or rarely enjoy reading and providing feedback. Forty-two percent of participants reported they enjoy reading and providing feedback some, with 38% reporting frequently and 21% reporting always. In summary, 20% of participants reported negatively about reading and providing feedback prior to treatment, whereas 79% enjoyed reading and providing feedback. After treatment, 100% reported enjoying reading and providing feedback. Analysis showed that 11 students moved positively. Probability for this result came in at .0775.

**Question 4: I follow the advice of my reader/audience.** Pretreatment, 12.5% of participants responded negatively to the question, with 0% reporting never, 12.5% reporting rarely. Thirty-seven point five percent of respondents identified as following advice some. Thirty-seven point five percent reported frequently, with only 4% claiming always.

<table>
<thead>
<tr>
<th>Response</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>No-Never (1)</td>
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<td>0</td>
</tr>
<tr>
<td>Rarely (2)</td>
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<tr>
<td>Frequently (4)</td>
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</tr>
<tr>
<td>Always (5)</td>
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<td>10</td>
</tr>
<tr>
<td>N=24</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>

Post treatment, only 8% reported feeling negative towards following the advice of another, with 0% still reporting never and only 8% reporting rarely. Of those reporting that they follow advice, some shifted from 37.5% to only 29%. Those who frequently follow advice decreased to 21%; however, 42% reported that they always follow another’s advice. In summary, 12.5% of pretreatment participants felt negatively toward peer review, with 87.5% feeling positively. After treatment, only 8% reported feeling negative toward following advice, with 92% reporting positively. Analysis showed that 10 participants did not change their judgment about this
question. Two moved negatively. Twelve moved positively. The probability for this result came in at .0049.

**Question 6: I ask a classmate to read my work before I turn in my final draft.**

Pretreatment, 59% of participants responded negatively to this question, with 21% reporting *never* and 37.5% reporting *rarely*. Twenty-five percent of *some* respondents identified as having their work peer reviewed prior to turning it in. Twelve percent reported *frequently*, with only 4% claiming *always*.

<table>
<thead>
<tr>
<th>Response</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td>No-Never (1)</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Rarely (2)</td>
<td>9</td>
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<tr>
<td>Some (3)</td>
<td>6</td>
<td>4</td>
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<td>Frequently (4)</td>
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<td>1</td>
<td>6</td>
</tr>
<tr>
<td>N=24</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>

Post treatment, only 33% reported negatively for this question, with 12.5% reporting *never* and 21% reporting *rarely*. Those reporting *some* shifted from 25% to 16%. Those who *frequently* had a peer read their draft prior to turning in increased to 25%, and another 25% reported *always*. In summary, 59% of pretreatment participants felt negatively toward a peer reviewing their final work, with 41% feeling positively. After treatment, 33% reported negatively, with 66% reporting positively. Analysis showed that 10 participants did not move in their judgment about this question. Three moved negatively. Eleven moved positively. Probability for this result came in at .0166.

**Question 9a: When doing peer review, I can focus on sentence-level errors.** Twelve point five percent of pretreatment participants responded negatively to this question, with 0% reporting *never* and 12.5% reporting *rarely*. Twenty-five percent of respondents identified as
able to focus on sentence-level errors *some*. Thirty-three point three percent reported *frequently*, with only 29.2% claiming *always*.

*Table 9: Question 9a: When doing peer review, I can focus on sentence-level errors*

<table>
<thead>
<tr>
<th>Response</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td>No-Never (1)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rarely (2)</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Some (3)</td>
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</tr>
<tr>
<td>N=24</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>

Post treatment, only 4% reported negatively for sentence-level errors, with 0% reporting *never* and only 4% reporting *rarely*. Of those reporting ability to focus on errors, *some* shifted from 25% to 12.5%. Those who identified as *frequently* able to focus on errors minimally increased to 37.5%, and 45.8% reported able to focus on errors *always*. In summary, 12.5% of pretreatment participants identified negatively toward their ability to focus on errors, with 87.5% identifying positively. After treatment, only 4% reported negatively toward peer review, with 96% reporting positively. Analysis showed that 14 participants did not move in their judgment about this question. One respondent moved negatively. Ten respondents moved positively. Probability for this result came in at .0084.

**Question 9b: When doing peer review, I can address the organization of the paper.**

Twelve point five percent of pretreatment participants responded negatively to the question, with 4.2% reporting *never* and 8.3% reporting *rarely*. Thirty seven point five percent of respondents identified as able to address organization *some*. Twenty-nine percent reported *frequently*, with 21% claiming *always*. 

56
Post treatment, 0% reported negatively on ability to address organization in a paper, with 0% reporting never and 0% reporting rarely. Those reporting some ability shifted from 37.5% to 8%. Those who identified their ability to address organization as frequently increased to 50%, with 42% reporting they were always able to address organization. In summary, prior to treatment, 12.5% of participants felt negatively toward their ability to address organization, whereas 87.5% felt positively. After treatment, 0% reported feeling negative about their ability to address organization, with 100% reporting positively. Analysis showed that nine participants did not change their judgment about this question. One moved negatively. Fourteen moved positively. Probability for this result came in at .0002.

Question 9h: When doing peer review I can focus on telling the writer how to fix their paper rather than listening to what the writer was trying to achieve. Twenty-five percent of pretreatment participants responded negatively to this question, with 0% reporting never and 25% reporting rarely. Fifty percent of respondents claimed some-times able to tell the writer what to do rather than listen. Seventeen percent reported frequently, with only 8% claiming always.

<table>
<thead>
<tr>
<th>Response</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td>No-Never (1)</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Rarely (2)</td>
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<td>Some (3)</td>
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<td>10</td>
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<tr>
<td>N=24</td>
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</tbody>
</table>
Post treatment, 37.5% reported *negatively* for telling the writer what to do rather than listen, with 12.5% reporting *never* and only 25% reporting *rarely*. Those reporting that they tell rather than listen *some* did not change but remained at 50%. Those who responded *frequently* decreased to 8.3%, with 4.2% reporting *always* telling rather than listening. In summary, 25% of pretreatment participants were incapable of focusing on telling rather than listening during peer review, with 75% positively capable. After treatment, only 37.5% reported negatively about their ability to focus on telling rather than listening, with 62.5% reporting that they could tell without listening. Analysis showed that seven participants did not move in their judgment about this question. Twelve moved negatively. Five moved positively. Probability for this result came in at .0568.

**Data nearing significance: Question 3: I enjoy others reading and providing feedback on my writing.** Twelve percent of pretreatment participants responded *negatively* to this question, with 8% reporting *never* and 12% reporting *rarely*. Thirty-three percent of respondents identified as enjoying *some*. Twenty-one percent reported frequently, with only 29% claiming *always*.
Post treatment, only 8% reported negatively, with 0% reporting *never* and only 8% reporting *rarely*. Those positively reporting *some* for another person reading and providing feedback shifted from 33% to 8%. Those reporting *frequently* minimally increased to 63% and 21% reporting *always*. In summary, 12% of pretreatment participants identified negatively to having someone else read and give feedback on their writing, with 88% reporting positively. After treatment, only 8% reported negatively for allowing someone to read and give feedback with 92% reporting positively. Analysis showed that seven participants did not shift their judgment about this question. Five moved negatively. Twelve moved positively. Probability for this result came in at .1072.

Data nearing significance: Question 7: I only ask my mother (or someone I know really well) to read my writing. Twenty-nine percent of pretreatment participants responded *negatively* to this question, with 21% reporting *never*, and 8% reporting *rarely*. Seventeen percent of respondents reported some. Forty-two percent reported *frequently*, with only 11% claiming *always*.

<table>
<thead>
<tr>
<th>Response</th>
<th>Pre test</th>
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<tbody>
<tr>
<td>No-Never</td>
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</tr>
<tr>
<td>Rarely</td>
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<tr>
<td>N=24</td>
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</tbody>
</table>
Post treatment, 38% reported negatively for allowing an intimate to read over their papers, with 25% reporting never and only 3% reporting rarely. Those reporting some shifted from 17% to 29%. Those who answered frequently decreased to 25%, with 8% now reporting always. In summary, 29% of pretreatment participants identified negatively, with 71% identifying positively. After treatment, 38% reported negatively toward having an intimate read their writing, with 62% reporting positively. Analysis showed that 10 participants did not change their judgment about this question. Ten moved negatively. Four moved positively. Probability for this result came in at .1308.

The SE survey does not measure the impact of modeling and imitating cognitive behaviors for peer review. What it does capture, in addition to emotional affiliation, is participants’ sense of ability to perform peer review, a judgment that either increased or decreased. Based on the student’s self-assessment of performance or thinking capability, in addition to identifying the emotional relationship participants had with peer review, students responded to 18 domain-specific questions (Bandura, 2006). The favorable movement of almost all students loving peer review after treatment may have been easily affected by treatment since a majority of students reported loving peer review in the pre survey. In fact, for almost all questions pretreatment, students responded positively toward peer review, with the majority of

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>No/Never</td>
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<td>Rarely</td>
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<td>Always</td>
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<td>2</td>
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<tr>
<td>N=24</td>
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<td>24</td>
</tr>
</tbody>
</table>
students reporting enjoying reading, following advice, an ability to address organization, and having others read their papers. The changes appear noteworthy, yet the changes seem contradictory to the in-class response writing done the week prior to the SE survey.

**An in-class writing.** The majority of students reported feeling favorable and able to engage in peer review according to the SE surveys. But their own writings tell a different story about how they viewed peer review prior to treatment. The second day of classes, students were asked to spend five minutes reflecting on and writing about peer review and what it means to them (see Appendix A). This writing happened before the distribution of the SE survey and treatment. On the day of the writing, 21 students were in attendance. The students’ responses were brief, rarely extending beyond two or three sentences and rarely acknowledging the reciprocity involved in peer review for it to be a collaborative or negotiated meaning-making activity. References of collaboration, albeit limited to four responses, were simply described as “being able to share my work with my classmates” (student response #8). The dominant theme was peer review as an activity happening to them (n=10); that is, “someone looks over my paper,” “someone reviews my work” (student responses #1 and #10). A few students understood peer review as an activity they performed on another student’s work (n=3): “I look over someone’s paper” (student responses #2 and #9). Others understood peer review not as a collaboration so much as something they did to a classmate’s paper and then something done to their paper (n=4):

> When I think of peer review I think of students reading my work and editing grammar/putting their thoughts in the margins for me to go back and think about. Usually I feel like the students add weird notes or don’t really try, and it’s weird for me to edit
theirs because even if I have what I think is good input, how do I know if they’ll read it?

Or worse, what if they do and judge me for my thoughts? (Student response #21)

The activity of peer review and the skillset needed to perform it seems a mysterious task in which students guess more often than they use their knowledge.

What stood out the most were the students’ descriptors when explaining peer review. Students used words and phrases like “judge,” “edit,” “make corrections,” “evaluated,” “check to see if I messed up,” “fix errors or problems.” These terms negatively denote surface-level assessments that perhaps reflect weak writing skills, but more important, they represent students’ belief about the kind of task performance in which they should be engaged. Rarely did students note that comments and feedback were options for the writer to consider, “to go back and think about,” to “ask myself if my writing is good.” Students seemed rather to think that peer review was primarily for “check[ing] others work so that they can get the best grade possible” (response #17) or just catching mistakes by “marking/writing some notes down on their thoughts or if something didn’t see write (sic), they’d mark where it was” (response #2).

Clearly, peer review is seen by students as an inability to self-correct their own writing. The activity does not contain even the slightest invitation for interaction, even if it is just to share knowledge for how to correct surface errors or emphasize deep meaning.

For the most part, students seem to unquestioningly accept their peers’ corrections, which may well account for 87.5% responding prior to treatment in the SE survey that they follow the advice of their readers. Respondents provided little evidence for the high level of interaction necessary for concept development. As well, many of the responses were written in third person, reinforcing a sense of distance with the task and maybe even intimidation that the other person,
the reader, was “able to see” or “check to see” simply by “looking over” the paper, whereas the writer could not.

Four students understood peer review as a collaborative activity in which they gathered together to critique and review to “provide input on how they could better their work” (see response #14), but a level of uncertainty remained. In fact, all the response were peppered with a level of doubt about their own ability: “I don’t know if I peer review correctly, but I try . . .,” “people seem hesitant of them, but I think they only benefit you,” and “it’s weird for me to edit theirs because even if I have what I think is good input, how do I know if they read it? Or worse, what if they do and judge me?” (responses #9, #12, and #21). Similarly, students who trusted themselves to give good feedback seemed doubtful of or disappointed in their peer’s ability: “I assume my partner will give me a non-bias [sic]answer,” or “they usually point out mechanical errors instead of really being critical,” or to “have other students read my writing makes me nervous,” or they simply do not like peer review:

Teacher: “okay class, today you’ll be doing a peer review with your classmates. . .”
Me (internally): oh god please no why would you do this to us I don’t know anybody here nor do I like them nor do I want to like them can’t you just read our papers yourself why why why why?! (usually) (student response #18)

**Post semester in-class writing.** Finals week, students were required to submit a writing portfolio. Before turning in their work, students were asked to do a timed in-class writing; students were directed to respond to the first question and then select two out of the additional five provided (see Appendix C). Question two asked students:

How has peer review influenced your writing? In what way have you incorporated or disregarded the feedback you received from peer review in your writing? What rules did you follow to develop your ability to be effective in giving peer review?
What will you continue to use in your writing life regarding feedback from others?

Sixteen of the twenty-four responding students chose to respond to this question (for full responses see Appendix D).

The end-of-semester responses were far different from the first week of class. When asked how peer review influenced their writing, students seemed to have an appreciation of audience awareness: “I like to see where other people are coming from,” or “I now have two different options,” or I gained “another’s perspective on my writing” (responses #1, #3, #5). Some students found that audience awareness could inspire them to reach further in their writing: “With all the same reactions from my peers saying they all got really excited . . . [which] made me excited to keep writing and show more detail to make it a better paper” (response #17). When asked how they incorporated or disregarded feedback, students responded by saying they would “look over their comments . . . sometimes choose to go with something they said or stick with what [the reviewer] had” and that they took “a step back” or “took every criticism and encouragement to heart” because it “challenged [them] to take a deeper look” at what they had written (response #1 and #12). The deliberation usually resulting in a global change in their writing: “maybe just change it altogether” or “changed a lot of [the] paper” (response #1). Just as important, students were able to identify weak or strong elements in a paper—“my thesis and my introduction,” “the structure,” “I focused more on the introduction, body paragraphs, and conclusion”—seemingly understanding that “with a bad structure a paper can’t really go anywhere” (responses #3, #4, #9, and #16).

Similarly, students became less critical, noting that when they read another’s writing, they needed to not “assume anything,” “never judge,” and to be “unbiased regardless of the
topic” (responses #4, #10, and #6). From that ability, students seem to have learned to read deeper and to be more engaged with their peers by becoming “slightly harsher;” before, they would not “get too much depth into the individual’s paper,” but now they said they were able to provide “good effective comments instead of comments that are dull and would not have helped at all” (responses #6 & 14). Clearly, the conversation about writing improved, but more important, students were making deliberate choices about their writing, taking ownership of the words and striving for deeper meaning and clarity. They literally were looking for areas where they or their peer may have unintentionally “fluffed up or had drawn out a sentence that could be condensed and still get the point across” (response # 6). These responses provide better evidence of the power of peer review but have yet to indicate how modeling or imitation affected student engagement or cognitive abilities for writing.

**Informal interview.** At the end of the semester, students were invited to attend an informal interview to provide information about SE survey results and the effectiveness of the tutor’s modeling and students’ imitating peer review (see Appendix I). The invitation was issued several times to the students prior to the last day of classes and incentivized with pizza and soda pop. Four students attended. The original data was an attempt to find correlations among domains. The interviews proved beneficial in this research by highlighting incongruities in the survey responses and students’ stated sentiments about peer review, but it also revealed that modeling peer review, and asking students to imitate modeled behaviors, had an impact with these students.

During the interview, students were forthcoming about the in-class presentation tutors had given. Oftentimes, they answered questions posed to them and, before I could ask for clarity, they were filling in little gaps, or moving the conversation ahead, or answering questions not yet
posed. Dominant themes included audience awareness, elements in a paper and or content, and planning and deliberation. More important, they indicated that by modeling and imitating the peer-review process, they had acquired identifiable skills. Throughout our talk, students referred back to high school or other college-level peer review as an assigned task in which “some of us didn’t really understand, um, how to give a peer review. We read [the essay] and we fix the grammar”. In other words, peer review was tedious guesswork for pleasing the teacher. Students had little notion of an overall framework to work in or that peer review was a collaborative activity to develop the paper, that another’s viewpoint can facilitate meaning making through dialog. But after observing the tutors model peer review, one student said:

It was an example, you know. It was an example of how it should be done correctly . . . and that helped me because I’m a hands-on learner, on how, uh, to do it more effectively . . . you know? I could see it. I could see the change, and I could see what they were talking about.

Once the concept and its practical applications were modeled, students quickly engaged in the activity. Peer review had new meaning, new value:

For me to see the behavior modeled of how they did—like how they broke it up and how they presented it and how they went through it . . . made it better for me because then I was able to take that modeled behavior and, and pass it on to [student 2] or whoever else’s papers I read throughout the semester. At the end I was very, very grateful because it was behavior that was modeled for me that I was able to go, “oh, okay. That’s what it’s supposed to be like.

Seeing peer review in action made the activity meaningful. As well, students now saw it as a transferrable skill. Moving student’s focus away from surface-level errors to global meaning
making had removed the guessing while allowing for variation, which was significant. Surface-level errors are distinct issues with set solutions if one has a base knowledge of English to account for its multiple exceptions and rules. Not many freshman writers have strong grammar knowledge. Focused on meaning making gave the writer permission to question their readers’ suggestions because only the author knew what the intent was. They became less intimidated. . . . previously . . . I thought that if they gave me feedback then I had to use that feedback . . . if they see it that way, everyone sees it that way. And my way that I see it is wrong . . . it’s not I have to use it. And I don’t.

Most of the feedback reported in the initial in-class writings characterized only surface-level errors with peer review as something being done to them or that they do to another. After observing and imitating peer review, students now understood that the focus was not grammar and mechanics but on

Content . . . we want to focus on content. Which was really freeing because then you get that ability to write just freely, not be so worried about what you’re . . . where you’re putting a comma or a hyphen or whatever. And that was so helpful to me.

They were enjoining in conversation about ideas, concepts, and meaning making, not grammar. Students understood that they “can always go back and fix grammar, but if [they] don’t get the content down, then the grammar is kind of a moot point,” which gave them “freedom to express.” Discovery through writing was the end goal now. Everyone has “different styles and [to know] that your style is okay. Your style may not be like somebody else’s style.” As well, these students could now “stand up for [their] writing.” Notably, the steadfastness they exerted suggests that they were always able to plan and set goals for their writing but were trapped in the hell of grammar and mechanics before concepts were fully developed.
Ostensibly, the turning point for sensing authorship of their writing is permission to ignore grammar and mechanics while concentrating on meaning making. Students talked about concept development and meaning making in their post in-class writings; but during this interview, they revealed that they now felt they were “able to stand up and say why, like, ‘I’m leaving this in because this adds to this to this . . . this is what I am trying to get across in my paper.” This statement is significant. Clearly, novice writers can and would plan, but they do not fully grasp the conceptual behaviors needed to discuss and develop their writing further. Currently, novice writers do not have enough editorial/authorial expertise to move conceptually beyond the tacit institutionalized message that “grammar, grammar, grammar” is the most important element in writing for personal growth and an audience.

This chapter provided quantitative data and qualitative feedback to assess the impact imitation and modeling peer review had on students learning to write at the college level. After observing tutors model and imitating those behaviors, students self-reported a new, clearer understanding of the purpose of peer review and the ability to enjoin in it. Chapter five provides a discussion on findings and how these finding relate to prior research.
Chapter 5: Discussion

The purpose of this exploratory study has been to understand whether modeling and imitation increase student ability and engagement with peer review in a composition class. To that end, my research questions focused on modeling cognitive strategies. Specifically, I asked if students were invited to imitate cognitive strategies after having observed tutors model, would they gain mastery performance skills necessary for peer review? The assumptions driving this investigation are that modeling cognitive strategies that facilitate diagnosing writing would increase students’ understanding of the process, allow students to engage more fully in the writing process and, because of increased engagement, result in better written products. Moreover, students would be inclined to retain this behavior for future writing tasks.

To demonstrate and validate successful cognitive strategies, students observed three tutors individually verbalizing aloud their cognitive strategies as they read a peer’s draft. After the tutors’ demonstration, class discussion was guided by Bandura’s recommendation for attributional feedback for reinforcing appropriate responses and positively impacting short-term then long-term memory, which piggybacks onto Vygotsky’s theory for incurring catalization in the nerve paths to create a redistribution of energy. Catalization is not memory but a change in the relationship of processes (Rieber, 1997, pp. 166–67). Students then discussed what aspects of this peer review were different from their other personal experiences with peer review. Next, students were asked to apply these strategies, first in large group, then in dyads, each time with different volunteered drafts. The instructor and the researcher provided feedback (“Okay, Joe. Why do you say that? [instructor listens and responds] Yes, that is true. How does that fit with what we heard the tutor say/do?”), while students continued to comment during all scenarios.
This small exploratory study did not have a control group; accordingly, I cannot conclusively determine whether modeling or imitation played a direct part in student’s positive reactions to peer review after treatment or whether the written product improved. In particular, I cannot assume causality or correlation because too many variables existed for me to control. However, the participants’ favorable claims for peer review and the effect modeling had on them indicate that modeling cognitive strategies changed these writers’ attitudes toward peer review and increased their awareness about performing a successful session. Providing observable behaviors and allowing students to imitate these behaviors decreased the mystique of the rhetorical situation and the interpretive demand of the rough draft. In addition, students are more engaged in the peer-review process and give it more value. Indeed, as a group, the students testified that they will use peer review for the various writing tasks they encounter in the future.6

**Talking, Speaking, Voice**

Language acquisition is a lifelong process. Vygotsky identifies three stages of speech development (Vygotsky & Luria, 1993, pp. 118–21). The first stage is the imitative stage in which vocalization is a reflex. Within this stage, individuals practice “concretization,” or the sounding out of words, or the repeating of the sound in all its sensuousness (an echoing that is visual, aural, and tactile). Another subset is the functional or purposeful use of words. As its subcategories suggest, this first stage deals mainly with learning single word forms and developing associative meanings that facilitate memory.

In the second stage of speech development, the pragmatic stage, the child can make full (if only involving one word) sentences. The words that constitute these sentences have

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6 Both the instructor and the students in this study say the writing improved because of modeling and imitation.
associative values that cluster and thereby retain their concreteness. Within this stage, children acquire awareness of the way in which the word relates to its object. Another subset of this stage involves the ability to express in order to control (i.e. get needs fulfilled). The third stage of speech development involves the use of words for concept development. As the intellect matures and word utility increases, speech moves from an external to internal speech. Vygotsky saw the first phase as a terminal one in which, as the individual became more proficient at problem solving, vocalizations diminished, until problem solving was wholly an internal endeavor. Vygotsky identified the three vocalizing behaviors attendant with these processes as ego speech, inner voice, and verbal thinking. The modeling and imitation demonstration in my study puts the emphasis on the writer to explain goals. With the focus on the writer, they have an opportunity to affirm planning but also their own voice rather than the voice of the other.

Talking seems requisite for all writers. Emig’s (1977) critical article notes “that for some of us, talking is a valuable, even necessary, form of pre-writing” (p. 123). Talking is a key element in raising consciousness (Rieber, 1997, p. 15). Talking also directs our attention and reduces cognitive load. Many times, when confronted with a difficult passage’s development, writers, both expert and novice, talk through the thought. Thus, when thought becomes difficult, people speak. And, when the task is especially difficult and the speech interrupted or restricted, the activity stops.

A number of students’ statements after participation in the study support these ideas about talking through their thoughts. They found that “as long as I write like I talk, I do very well,” and “if I can make the connection of writing as I speak, then it comes out okay,” and “to put things down from your mind . . . to state your thoughts” is the primary goal in producing good text.
These findings are contrary to Flower and Haye’s (1979) research suggesting that novice writers use their undeveloped ego speech that “is not at the conceptual stage” (p.22). The Flower and Hayes understanding of ego speech taxes short-term memory, preventing the writer from making whole meanings. In their observations, novice writers were “focused on the mechanics” and formatting (1980, p. 30). While it is true that ego speech is initially social in nature, a young person who begins imitating the talk of another always does so as an accompaniment to activity (Rieber, 1999, p. 259). Ego speech is the means for the mental operations of attention and planning and reflection to develop. When ego speech turns into inner speech, the latter functions to facilitate these mental behaviors, but for intellectual orientation (p. 257-60). In other words, talking to oneself for oneself is an important part of cognition.

Supporting Flower and Haye’s studies, Van Den Bergh and Rijlaarsdam (2001) elaborate on the importance of the moment cognitive activities begin taking place during writing. They found that cognitive activities are not randomly distributed over the writing process; instead, at some stages one activity will be dominant, whereas at other stages, other activities will be dominant. Therefore, dependent on the short-term goals assigned by the individual to fulfil the task situation, these small goals alter dependence on the changing cognitive representations being created (p.375). This suggests that a writer may be translating with short-term goals of connecting relevancy to the text thus far developed but then realize that potential examples do not support or fulfill the gap. By attempting to fit the examples, the writer gains new insight about the topic, which causes them to either add or take text away during the process of invention. Significantly, the writers in Van Den Bergh and Rijlaarsdam’s study, who verbalized multiple writing scenarios or provided numerous task representations for text production, produced better text. Additionally, writers who actively formed textual meanings
during writing also produced better text. The implication is that writers who can be flexible and not overwhelmed by the changing textual cues have mastery/focus over their writing and that this can be achieved through talking (i.e. ego speech or inner speech). Talking, using inner and ego speech, may be the dominant force contributing to text production. Emphasizing one over the other may be a mistake.

The monologic form of inner speech involves the mediation of thought into word, or it’s reverse, “the evaporation of word into thought” (Rieber, 1999, p. 257). Inner speech has a truncated form and its own syntax because the thought is much larger than the words that encapsulate it. This inner speech allows individuals to think verbally, to provide an uptake or outgo of information. However, unlike verbal thinking, in inner speech the association of certain words with certain meanings is a process, a movement from thought to word and word to thought (Rieber, 1999, p. 249). Vygotsky tells us that words complete thoughts; sequential word compilations correspond only in part with the writer’s intended meaning. Ego speech then can be seen as the final step for conveyance of external thoughts. Clearly, the expert writers in Flower and Hayes’s (1981b) studies had experience developing content, but the novice writers were performing at same level of competency, as the jumbled text production suggests. Perhaps the difference in performance had more to do with inaccurate expectations regarding the written product, which may have interfered with the writing process. Or, perhaps the writing process was interrupted, and the novice writer could not reestablish the train of thought.

The students in this dissertation study found that talking while writing was requisite for text production. They learned that that they “could always go back and fix grammar, but if you didn’t get the content down, then the grammar is kind of a moot point . . . that kind of gave me freedom to express myself.” They also indicated that when they focused on the content it “was
really freeing because then you get that ability to write just freely.” These comments indicate that ego voice is neither a sign of immature writing skills nor a vestigial relapse but is perhaps a necessary step in the process of writing for conceptual development. Accordingly, ego speech contributes significantly to the texts all writers create but especially to novice writers who are grappling with new, complex ideas as well as their ability to explain them.

The cognitive demand writing places on students is especially high in upper-level education. Postsecondary writers must identify what the context, ideal, or premise is, an ability which requires them first to interpret another’s understanding of a complex issue, to develop self-meaning, and then to recapture that meaning in new phrasing to put it down on the page; this process is what Flower and Hayes described as “translation” (1981a, p. 373). But, the process is not simplistic. Translating inner-thought into inner speech then to external-speech is a complex activity requiring reflection, selection, and negotiation (Rieber 1999, p. 272). The novice writer grappling with complex ideas is confronted with an even harder task of translating barely comprehended terms into coherent text. Instead, Flower and Hayes’s understand of translation as capturing “symbolic thought that is not necessarily verbal thinking” while allowing that the syntax may be different (Vygotsky, 1981a, p. 373). In contrast to what Vygotsky suggests, the conscious attention their students (Flower and Hayes 1977; 1981; 1989) devoted to surface-level errors interfered with the students’ ability to make global changes or to plan; the research indicated that those novice writers had not yet reached the necessary level of psychological ability, or that their priorities were misinformed and they thus experienced cognitive overload. Not until later did Hayes’s (2012) reorganization of the writing process allow that motivation was affected by engagement (i.e. “willingness”) (p. 385) and not cognitive overload. Talking seems to facilitate the writer’s engagement.
The students of this study equated writing with speaking and found talking beneficial, even necessary, for text creation: “As long as I can write like I talk,” or “if I can make that connection of writing as I speak, then it comes out okay,” or they need to “put things down from their mind” first, then worry about “where you’re putting a comma or a hyphen or whatever.” The writers in this study seemed to have a greater sense of focus during writing when allowed to follow their voices. Ostensibly, a writer speaking while creating text is working at a high level of engagement and is working deliberatively toward goals.

Each writer has a goal, and speech reinforces and sustains that goal. One of Vygotsky’s principle theses is that intellect builds when individuals use words as tools; such use leads to deliberate consciousness, which creates higher mental functions. Thus, HMFs arise in the ZPD as a product of social interaction and the deliberate use of intellect. Each time a person learns a word that changes or broadens their consciousness, that word relates in various ways with others to produce fuller meanings. Initially, word relationships are first concrete and become more abstract. When individuals acquire word usage at a certain level, they begin to use words for more than communication; they use words to control their environment and to perform goal-directed behaviors. According to Vygotsky, this usage emerges because words point. That is, when we are taught a word, we are directed to look at the object and repeat the word; words inherently retain a pointing characteristic. And so, quite simply, words direct our attention.

Words and their meanings become complex yet retain concreteness by the time a young person enters school. For Vygotsky, school forces abstraction by creating a context that does not have an empirical referent. The words being taught have acquired humanistic ideals and scientific connotations about which students lack firsthand experience. To complicate the situation, these decontextualized words are nested in systems, systems that have more to do with complex plural
meanings rather than with one object, one word. Accordingly, a learner must pay attention to and allow for huge gaps in meaning during instruction. Once the systems in which these concepts operate are introduced, their acquisition leads to a “fundamental reconstruction of an individual’s understanding of the world and [their] reality which affects the mind by creating new psychological abilities or mental operations” (Rieber, 1999, p. 369)—what Vygotsky refers often to as HMFs. This suspended understanding, while remaining engaged (i.e. maintaining interest), is what Vygotsky refers to as volitional attention; it is the gateway HMF for the development of all other HMFs, or the first buds of developing mental operations. Having students write rather than talk, having the author receive rather than create information, focuses a student’s attention on producing meaningful associations, as this study seems to imply.

**Volitional Attention**

By imitating, a person demonstrates volitional attention, the first step in development of HMFs in the ZPD. The ability to imitate, and the volitional consciousness that initiates it, is different from thinking. Thinking happens in all animals. Intellect and the mental operations that give rise to it are human phenomena; a meta-awareness. Because words are culturally bound, socially constructed, they exhibit relational patterns of interaction become mental models for patterns of knowing. Language is neither static in the social realm nor in consciousness. Most likely, scholars confuse the ZPD with the Marxist social aspect embedded in Vygotsky’s work when references to cooperation are used:

Every higher psychological function was formerly a peculiar form of psychological cooperation, and only later became an individual way of behavior, transplanting inside the child’s psychological system a structure that, in the course of such transfer, preserves
all the main features of its symbolic structure, altering only its situation (van de Veer and Valsiner, 1994).

In interaction with others, we learn how to behave socially and intellectually. The movement from doing what is known to what is unknown requires being dependent on a more capable peer long before mastery and independence (Vygotsky, 1986, p. 188). If we are to take Vygotsky’s theory of language acquisition seriously, then encouraging imitation of mental models or patterns of knowing may well be a key to further developing intellectual awareness, engagement, and proficiency. Certainly, students in this study reported that after modeling they were able to create meaning more facilely; they were able to “just write freely,” giving them “the freedom to express [themselves].” One student wrote, “After seeing that behavior modeled of how they did—like how they broke it up and how they presented it and how they went through it with me made it better for me.” Students gained a new confidence in their ability to make meaning but also to diagnosis their and their peers’ texts. Modeling and encouraging students to imitate made the students more likely to “pass it on” to another student, creating a community of writers with like goals and ability. Modeling and the opportunity to imitate provides an effective approach for teaching student writers the value of peer review and scenarios for performing it.

In an earlier study, Flower, Hayes, Schriver, and Stratman (1986) suggested that modeling would be untenable because the process of effective revision had far too much variation. A schematic template would be too hard to follow. They also suggested that revision does not happen if error is not recognized (p. 19); this position seems to equate product with process by emphasizing error rather than by providing a forum for writers to discuss the development of ideas. The study goes on to suggest that a complex decision-making process underlies the visible behavior of revision (p. 19), that the intentions or goals of weak writers may
differ from those to which expert writers attend. And finally, what the weak writer finds significant, what garners their attention, is different from experienced writers. Moreover, revising demands activate usable knowledge, all of which seems to suggest novice writers lack content knowledge (pp. 18–20). Because of these reasons, they claim, modeling would not work; if “a given performance of revision depends on a dynamic interplay of knowledge and intentions, how can the process of revision be effectively” modeled (p. 21)? Revision in this scenario is “detection, diagnosis, and strategic action” (p. 53), and the meaning making required here seems to come of partially external and internal knowledge.

Since then, several studies have shown the value of modeling. Modeling focuses attention on the cognitive behaviors students desire and need and provides a concrete solution with observable operations that, when tied to abstract principles, works as a remedy for any cognitive deficiency.

An early study by Schunk (1981) found that children who received modeling outperformed those who only received instruction. Students who received attributional feedback in addition to modeling scored even higher; however, their self-efficacy did not improve. Schunk suggests the reason for this is that the emotions involved in learning delay any evidence that the learner has learned something new. Because writing is a varied and complicated task, writers may not necessarily identify a learned capability when confronted with a subsequent specific and difficult writing task. This understanding of delay may help to explain why the students in my study’s self-efficacy assessment only changed minimally except in organization. Organization was a primary focus during the presentations and the development of these drafts, as well as sentence-level meaning making.
Students self-reported after modeling and imitating that they “truly understood the purpose of peer review.” Having peer tutors model gave students an objective goal to imitate but also narrowed down the associative time needed for student to establish a shared understanding for negotiation and consensus building in their dyads (Kumpulianen & Kaartinen, 2003, p. 368). Levels of trust and authority that guide conversations were increased. Students were no longer guessing about how to perform peer review. As a result, the process for peer review was shared knowledge. The peer tutors served several important efficacy functions, but foremost provided students a “comparative appraisal” (Bandura, 1989, p. 64) of how to do peer review while allowing for variety of possible responses.

Certainly, any time a teacher instructs students to focus on a specific aspect of writing, the students will be affected; the moment has cognitive significance. But, as Stolarek (1994) points out, freshman writers have not developed ways to analyze or identify abstract language features (p. 169). By simply calling attention to prose models by exceptional students or expert authors, and identifying important aspects of the writing during discussion, students’ writing may improve, but only minimally. They may be able to reproduce like text, but replication does not necessarily indicate cognitive understanding about why the text is constructed as it is. The results of my study seem to suggest that modeling cognitive behaviors gives students the how and a little why from which to develop meaning. Modeling does more than allow students to see how to “break up” the task of writing into manageable parts. It shows them “how to take a step back” and reassess intended meaning. Prior to observing and imitating, they tended to “cut sentences off short for fear of having run-ons and lots of thoughts in one sentence.” At that point, their inner voice, which captured meaning, was the dominant, and perhaps only, operant facilitating
their writing. After modeling, students were able to “expand their thoughts” through writing by creating “different wording that would fit better.”

Creating a community of writers through peer review should contribute to audience awareness. But, when the audience believes that its task is to help fix “stylistic choices” or “look for misspelled words and misplaced commas,” the activity does not foster meaning making. Peer review becomes a prohibitive activity rather than one conducive to the writing process. The syntactic structures, especially of a rough draft, are most likely streams of thought captured by the writer’s inner voice but not yet reconstituted to fix social constructs of meaning. When students in this study observed models who overlooked mechanics and grammar while focusing on meaning and asked the writer to supply that meaning, they understood: “Oh, okay. That’s what it’s supposed to be like.” The modeled conversational exchange focused on meaning can heighten awareness of gaps in logic, if not alter, the writer who hears only her fluid inner “voice all the time.” When a peer explains “what they perceive from it [the paper],” it alters the writer’s “voice coming out.” The conversation can be most helpful during draft development, more so than reading out loud, because students report that when they “read aloud” it still sounds okay to them.

As rough drafts reflect writers’ inner thoughts, the intended meaning has yet to be unpacked into Standard English. Aligning writing with audience can indeed contribute to the writer’s process. Kinsler (1990) found that peer collaboration positively impacted student revision by providing a sense of audience and then built awareness for unity, focus, and organization. Kinsler’s students began anticipating peer objections or approval of text development with more and more frequency, a valued attribute of expert writing (cf. Flower & Hayes). In my study, students told me that once they understood the purpose of peer review,
“being able to see someone’s point of view really helped point out the flaws that might not be clear at first.” Moreover, they noted that sharing their work with another “challenged [the writer] to take a deeper look” at what they were trying to say rather than “glaze over the paper,” and that “understand[ing] where other people are coming from” caused to “weigh options.” Their awareness to aspects of textual development and their intentions to revise solidified during peer review.

Supporting Kinsler and my study, Braaksma, Rijlaarsdam, Huub, and van Hout-Wolters (2004) studied young writers who demonstrated cognitive strategies for learning to write rather than focusing on the production of writing with models. Their study found that observational learning positively affected writing processes. Writers performed more high-level processes, such as planning. Moreover, these writers showed a changing pattern of execution over time, whereas the control group showed no improvement in their writing ability or level of engagement.

The data from the students in my study seem to support these behaviors. Their new-found freedom to express their thoughts provided evidence that they were indeed planning and goal setting while developing complex ideas into words. They reported they were able to “focus on content,” to “look at transitions,” to see connections “from one paragraph to the other,” and able to say “this is my thesis statement.” They had clear goals and knew what was needed “to present in the body of the paper” and when to “wrap it up.” In the event a peer suggested they move text or end a passage at a particular point, students were able to say, “I am going to leave it in there, because this is the transition,” or they told me “I’m leaving this in because this adds to this.”

Graff (2009) points out that peer review is problematic for most writers. Graff’s solution was to make cognitive strategies explicit by modeling them with students and directing them to
practice these strategies by thinking aloud or imitating. Graff’s study used published texts as a way to help students gain critical thinking skills. His goal was for students to develop an internal voice that focused on providing higher-level meaning-making tasks for the reader (p. 81). This study was highly controlled, with repeated guided assistance coupled with worksheets. Graff gave verbal examples of appropriate answers, then explained the cognitive strategies he used to arrive at those answers:

After modeling my thinking process as I read aloud, I list a few of the strategies I used to make sense of the letter on the board—strategies such as tapping prior knowledge, making connections, asking questions, making predictions, and summarizing and connect the strategies with the comment that relates to them. (p. 82)

Graff’s study “works better with these more polished drafts than with drafts the authors know are rough” (p. 83), perhaps because deriving meaning from a rough draft is much harder for readers than from finished drafts. More likely the interpretive demands are different for reading than for writing (Emig, 1977). After training his students on what to think and how to meet his expectations for the assignment, Graff allows that their “reading and responses to each other’s texts, therefore, will not be authentic in the sense of being exactly the responses that would go through their heads if they were reading silently; they will be authentic in the sense of being focused on meaning making” (p. 86). By implication, these students have not learned how to write for themselves but how to write to the expectations of the teacher. Yet, Graff hopes that by thinking aloud the students’ cognition will change (p. 85). Rather than allow the writer to articulate their intentions, Graff’s study seems to subvert autonomy for institutional correctness.

Graff’s study was unable to prove any cognitive change, or whether students found value in this treatment or would continue to use it beyond that class. The students in my current study
did find value in modeling: they reported that they would “take that modeled behavior and . . . and pass it on to [the next person].” They had a clear understanding of what they “should aspire to,” demonstrating that students are capable of performing higher cognitive behaviors once expectations are clarified and they are given time to practice.

Authority of Text

The most striking finding in my study is arguably that students self-reported a new felt sense of authority for their writing. Often in the focus-group talk, they told me “writing was personal” or “writing was a personal choice.” They also noted that having a different style was “okay” because it was about what they were trying to represent, not “how [the student was] telling them.” Or, they told me, “Sometimes I chose to go with something they said or stick with what I have, or change it altogether.” Again and again, I read or heard students telling me that after a peer-review session, they would “look back at [the] writing and make changes to it.” But, they did not do so without serious consideration. They would “weigh the options.” Or, they would “look at their paper in a different way and usually reword a sentence or rephrase a difficult section. Or they wrote, “I don’t always follow their advice on sentence structure or how my sentences are worded.” Clearly, they had started to be deliberative about their writing and about making choices in developing the writing. As well, they were becoming critical readers; where they were once “prone to be easy . . . not really get too much depth” in a peer’s paper, they now expressed a desire for deeper meanings from their peers. Specifically, this kind of behavior suggests that the students were operating at a higher cognitive level. They were making conscious, deliberate decisions about word choice, which effected how they understood the conceptual meanings they were developing through text.
College essays are more than a communicative endeavor. They are vehicles through which a teacher is able to glimpse the intellectual development of the student at a discrete moment in time. In an attempt to explain, students must first discover what new knowledge has been acquired and then make it meaningful to themselves. The writer, then, is the primary audience. Evaluation of ability to analyze, synthesize, explain, define, and apply often occurs through the medium of writing. These complex mental behaviors are not taught but are assumed to be an organic biological development, as Graff’s or Flower and Hayes’s studies suggest. Perhaps, just as language is taught, so too should the application of higher-order thinking skills be taught.

Similarly, the conceptual demand of writing requires making inner thought external speech, which Vygotsky tells us is a complex translation involving the materialization of thought into word (Rieber, 1999, p. 280), yet a single word does not suffice. Words partition thought. What is contained fully in thought is sequentially revealed in words (p. 282). This is significant because while students grapple with understanding complex social issues, sophisticated ideas, or problematized concepts, they must appropriate and regurgitate the information in terms, or concepts, of their own creation. Novice writers must find new wording to fit these still-maturing meanings. Speaking out loud while writing moves inner thought to external, public speech. This talking out seems as important as talking in when first acquiring language (intermental to intramental).

Bruffee (1984) once said that

any effort to understand and cultivate the kind of thought we value most requires us to understand and cultivate the kinds of community life that establish and maintain
conversation that is the origin of that kind of thought. To think well as individuals, we must learn to think well collectively. (p. 646).

The ability to think critically and accurately express these thoughts is a learned behavior. My study suggests that modeling cognitive strategies in a community of learners may very well cultivate that kind of community of thinkers. The expectation that students naturally jump to the next level of cognitive ability through writing and reading alone is simply not warranted given the history of how we learn language. If language acquisition occurs through modeling and imitation, while fostered with positive interaction, as Vygotsky asserts (Rieber, 1999, p.368), then observing the mental machinations of others can only be a benefit, especially when coupled with guided response and the opportunity to emulate (Bandura, 1989; Flynn & King, 1993; Shamood & Burns, 1995). Writing serves various important societal roles. In academia, writing is a tool to enable thinking, a stabilizing armature of the mind that enables us to create more complex and precise meanings when executed well. I have found through this study that deliberate modeling and imitation not only improves writer efficacy, contributes to motivation, creates shared goals in a group setting, and alleviates guesswork between student and teacher expectations, but that modeling and imitating cognitive behaviors fosters in the writer a sense of authority and ownership of text not usually found in weak writers.

Once the students in my study observed the cognitive behaviors of more experienced peers, their awareness of the kinds of mental behaviors which contribute to meaning making and learning was raised. SE scores prior to treatment suggested that the students liked peer review moderately; yet their first in-class writing to explain how they understood peer review revealed passive engagement. Students seemed to understand the peer-review process not as the transaction of ideas (Bruffee, 1984) but as something peers did to them or vice versa. Student
participants did not typically find any value in the process beyond getting someone to “fix any errors or problems;” such statements suggest that these writers lacked the ability to self-correct or develop the paper further. Moreover, such statements indicate that once their peer “evaluates” or “judges” the paper and removes the errors, the text will be clearer and more complete, as if meaning happens simply by removing surface-level errors.
Chapter 6: Implications and Limitations

This study was prompted by my work in the WC; specifically, in attempting to reach beyond the politics of writing center work, I have sought to understand effective strategies that may enhance tutor effectiveness and facilitate better interaction during peer review. Overall, I have shown that modeling and imitating verbal articulations when addressing higher-order thinking can have a positive impact on writers, allowing them to engage in a conversation about their writing. From that outcome, I have shown that writers’ sense of efficacy and engagement can be positively increased.

To those ends, in Chapter One, I discussed WC orthodoxy that focused on the constructs of direct and indirect tutoring. Much of the literature for WC theory and pedagogy favored asking students leading questions rather than telling answers. Other scholarship suggested that showing might be more beneficial. From this polarized discussion, I introduced the history of imitation as a long-standing pedagogical tool and natural process for language acquisition. I then presented Vygotsky’s theory of imitation and the development of higher mental operations. Next, I put forward that most authors’ use of Vygotsky’s theory of the ZPD as a situated learning event; such usage misrepresents his thinking, most significantly by ignoring imitation. Accordingly, I emphasized how imitation does not support repetition or dependency, as typically charged; rather, it invites the learner to move toward independence by instantiating intellectual operations and reducing guesswork. These operations facilitate the writer’s ability to fulfill long- and short-term goals. The learner’s ability to move from dependent to independent is a major contributor in Vygotsky’s theory socio-historical development. With this adjusted understanding
of language learning, I looked to Bandura’s refinement of protocols for modeling cognitive strategies as an interventional treatment to facilitate peer review.

To situate my study, Chapter 2 provided scholarly background by discussing peer review, which is comparable to one-on-one writing tutorials. In both environments, writers are rarely advocates for their own writing; rather they tend to take suggestions blindly without question. In the classroom, writers’ and peer reviewers’ suggestions usually address surface-level concerns. Chapter 2 also attempted to reify Flower and Hayes’s novice writing behaviors. Their emphasis on writer talk and loss of short-term goals, which were used markers for movement in the participants’ stated ability. Flower and Hayes’s research found weak writers unable to sustain focus long enough to develop meaningful text because they were dependent on ego voice.

In Chapter 3, I displayed the results using qualitative and quantitative data. I explained my data set, my protocol for modeling, and the use of SE surveys. More specifically, I first provided a descriptive narrative of results from pre and post SE surveys. As discussed, the SE data analysis was fairly straightforward, using basic statistical methods: averaging, mean and mode ranges, standard deviation to measure students’ self-reported sense of efficacy before and after treatment. I then summarize and compared students’ pre and post in-class writings. Students showed positive movement in their regard for peer review and in an ability to identify and discuss organization in a paper.

In Chapter 4, I provided analysis of findings compared to other scholarly research. I discuss at length how imitation and modeling positively impacted the students’ ability to talk about their writing and enjoin in more deliberative revision practices. I aligned findings with research questions and reintroduced ego speech as an important part of the writing process.
In Chapter 5, I discussed how the findings support my research questions and align them with other scholarly research on peer review. My interpretation of the data suggests that ego voice, or out-loud talking, is an important behavior during the writing process. To support this belief, I note that scholarship frequently refers to talking, as well as to Vygotsky’s observance that talking is an important feature for language acquisition and development of HMFs.

As discussed in this dissertation, for Vygotsky, ego-speech was an age-related behavior (Rieber, 1987, p. 8). But, based on my study, I posit that speaking out loud is a highly functional tool. The learner reverts to it as needed, as the writers in my study claim to enjoin and as Emig and most any experienced writer will avow. Rather than dismiss the value of talking, I believe we should encourage writers to articulate, especially when developing a tentative thought. Vygotsky stated often that HMFs do not replace but modify or enhance existing ones; it seems reasonable to suggest that ego speech would fully reside at intra-intermental stages for college-level learners. This understanding seems reasonable given that the demands for concept development increases at this academic level, especially when coupled with the activity of writing. Contrary to Vygotsky, my study suggests that ego speech does not seem to disappear at the adolescent stage of development but remains functional and is an essential aspect of imitation and modeling processes for writing.

**Implications**

Through the written and verbal responses of participants, I was able to identify burgeoning behaviors that seemed to indicate a cognitive change (Bandura & Adams 1977). Participants were asked to write about their experience with peer review and invited to participate in an informal interview to help clarify or affirm interpretation of the data. From this interview, I found that I had misapplied some statistical analysis, so I reconfigured the data. Yet,
overall, modeling and imitation resulted in positive outcomes regarding my research questions: writers self-reported increased thinking strategies, which facilitated better writing, which improved motivation. Moreover, students were able to sustain short- and long-term planning as well as other goal-directed behaviors necessary for development of text. Students were far more willing to listen to the advice of their peers and deliberate as to whether or not to employ suggestions. Given these results, I believe that verbal modeling and imitation is an effective tool for students to increase critical reading, writing, and thinking.

Both the instructor and the students reported improved writing ability. An unexpected outcome was that students expressed having a strong sense of authority over their writing and over thinking deliberatively about the text and its meaning. Yet, just as important, this study seems to support the use of talking as a tool during the writing process. This finding is contrary to Flower and Hayes’s studies, which suggested that talking was inexperienced chatter that interfered with text production. In contrast, the participants of my study suggested that talking while writing, and talking about their writing, were necessary to text development. This finding counters Vygotsky’s assertion that ego voice recedes over time to become an internal function. The writers in this study found talking to themselves a meaningful behavior rather than writing to an unknown audience’s expectations during text production.

In part, the success of this small exploratory study may be based on normalizing possible behaviors and responses. The modeled tutor session shows that everyone responds to writing differently either because they have a limited knowledge base (so they address what they can and ignore the rest) or simply because a reader might focus on personal peccadillos in the writing. This awareness gave the students an opportunity to challenge those proclivities rather than blindly accept them. In other words, students discovered that when writing, they may ignore the
“other” to construct their own meaning, which may be the contributing factor to their deliberative thinking and writing.

Modeling and imitation seem to be common sense, given Vygotsky’s elaborate observance of how language acquisition takes place, along with Bandura’s bolstering that stance with the concept of vicarious learning. However, Pajares (2002) quotes Voltaire to elegantly reminds us that if this all seems like little more than mere frivolity, we must remember that “common sense is not so common.” In my attempt not to be reductive (Rose, 1998), let me be clear. I do not think that writing in itself raises cognitive ability, as so many researchers have correctly argued (see Cole & Scribner 1981; Heath, 1983; Ackerman 1993). Intellectual acumen is socially bound, and school exacts levels of cognitive behaviors like no other social setting. But, I do think that modeling and imitating articulations increase students’ cognitive awareness of how to employ those behaviors or grants students permission to use cognitive behaviors that may lead to development. Vygotsky was clear that learning and developing mental operations were two different processes; yet, for both, external social contexts create an internal paradigm of functional mental behaviors. Contrary to the fears of many WC scholars, imitation never involves a one-to-one correspondence between the person showing and the person doing. Imitators never repeated with exact imitative responses—variation and progression have precedence. As well, imitation requires that the imitator is at or nearing the cognitive ability being modeled; otherwise, students will not be able to perform. The participant must have an interest and willingness to follow the modeler. Interestingly, being allowed to imitate seems to increase engagement.

Following Rose’s caveats about judging thought processes, learning styles, and learning pace, I did not assume the students lacked the necessary cognitive development or were deficient
in any way. In fact, I assumed they possessed the level of cognition necessary for imitation. My goal was to show, rather than tell, students; by doing so, students would understand more fully how cognitive procedures and practice can benefit peer review and lead to fuller development of the written product. Tutors’ exhibitions provided a synergistic, viable relationship between writing, thinking, and concept building. Three tutors provided three variations in reading and discussing a paper’s development. Key words were blend, synthesize (when quoting), explain, support, analyze, and organize, while the students observed the interaction or read along with the text on the large screen. Following Bandura’s social cognitive theory, students were able to associate elements of the visualized text with these key words. As a result, participants could hear and see where the text benefitted from expansion or condensation, or were able to make comparisons with tutor’s verbal examples when the writer was at a loss for words.

Robert Frost is known to have said that “talking is a hydrant in the yard and writing is a faucet upstairs in the house. Opening the first takes the pressure off the second.” As I researched writing scholarship, I frequently found that talking is an important factor during the writing process. And yet, so much of the scholarship regarding the writing process dismissed vocalizations, finding them characteristic of weaker, novice writing behavior (indirectly aligning with Vygotsky’s assertion that ego-voice is a temporary, immature stage in language acquisition). However, in the research about peer review and self-efficacy, talking is an observed behavior in both young and mature subjects. In these kinds of studies, talking seemed quintessential but was not the focus of study; as such, no conclusions were drawn. Peer-review and WC work enjoins the writer in a conversation about writing; actual composing of text occurs before and after the session. For WC work, talking is the mainstay for guiding thinking processes. Rather than employing leading questions, which cognitively tax the writer (Johnson,
1993), modeling mental operations can open the door to a different pedagogy not grounded in modes, one affirming cognitive behaviors from which writers can develop their own meaning more fully, as the students in this study support (Bird, 2012).

Future Development

Though this study did not gather data at the individual tutorial level, future studies might consider doing so. Having tutors deliberately model their thinking strategies and invite the writer to imitate that behavior, might yield interesting data. Emphasizing how to think about synthesizing and organizing information paragraph by paragraph may be more beneficial for helping weak writers to (re)set goals, but this practice may help proficient writers, too.

I have found that talking is especially important when discussing individual conceptual development because “speech manifests with great persistence and increases whenever the situation becomes more difficult and the goal is not easily attained” (Rieber, 1987, p. 15). Talking plays an important and specific role that is “inseparable” and “internally necessary” in achieving a goal. The more “complex, less direct solution” involved in the process of solving, the more important speech becomes (Rieber, 1987, p. 15). People talk out loud when they need to solve a problem. Writers talk out loud when they are confronted with complicated meanings not readily available to words or text. Accordingly, speaking initiates the ability to control conscious deliberation. What sounds like babble to the eavesdropper is deliberate goal-directed meaning making. With this new awareness, (ego) speech becomes a tool of purposeful behavior. When fully developed, speech, and the awareness that comes of it, support comprehension, solving, or planning. Understanding the importance of talk, and developing pedagogy around it, has strong implications for future WC work.
Other WC scholars have tapped into talking as a viable tool. Muriel Harris’s (1983) study adopted Bandura’s modeling by using Ericsson’s talk-alouds to diagnose writing behaviors in a novice writer and to demonstrate to the novice how expert writers execute the task. However, the demonstration consisted of biomechanics and initial sentence development rather than the critical thought associations of subtext and organization of an already established, longer piece of writing. That is to say, the study addressed the initial stage of text production rather than the dense meaningful relationships of paragraphs or the way to think about those relationships, a much-needed ability for text development. These larger chunks of meaning have felt associations for the writer, which need to be manifested in the text. As well, Harris measured for misspellings and verb agreements, all surface-level concerns. The deeper cognitive operations that facilitate developing meaningful analysis were not anticipated at this stage of writing. Future work might duplicate this study with attention to development of deep meaning in the first draft.

Just as important, reliance on the writing-process model (Flower and Hayes’s scholarship) is not a set process but has multiple elements of interchange that vary dependent on the writer’s discretionary goals; these may or may not change multiple times during text production—all of which is far too intricate and varied for a successful tutorial using peer tutors. Perhaps this is why Harris suggests in her study,

Neither verbal protocols nor modeling, or even a combination of both, can be said to be tools of absolute value. At best they are available as methods for serious study and research and can be strategies to add to our repertoire. (p. 81)

The simplicity of talking through writing—even with the successful adaptation of her students’ writing behaviors—perhaps seemed reductive to Harris as well. Additional research with a larger
Flynn and King (1993) have provided a small anthology arguing that WC work should focus on cognitive development instead of using leading questions, suggesting that such questions stymie the writer rather than lead to conclusions. Adding to that repertoire of research would be Ericsson’s (1993) methodology of verbal protocols. In several studies done by Ericsson, control participants who overheard subjects were strongly influenced and repeated overheard content. My study was a limited, small, exploratory investigation in which the methodology was cursory. Ericsson’s research on TAP complements Bandura’s vicarious observers and provides another level of rigor contributing to a stronger interpretation of outcomes. The field of research addressing out-loud chat or using TAP is vast and could yield interpretive value as well as criteria for data analysis. Additionally, Ericsson’s protocols fall neatly in line with Vygotsky’s position on ego speech. Future work might elaborate or recreate one of Ericsson’s studies emphasizing the use of ego voice or do a microstudy of Flynn and King’s assertion for modeling cognitive behaviors in a tutorial combined with SE surveys.

Another future study may examine gesture as a contributor to cognitive development. Cognitive research has shown that when an “observer” observes a “doer” doing, the observer’s brain activity mirrors that of the doer. Garbarini and Adenzato’s (2004) research tells us that bodiness is a combination of a physical structure (the biological) and an experiential structure, which corresponds to the body. From here we arrive at the dual acceptation of embodied cognition, which refers to the grounding of cognitive process, in the brain’s neuroanatomical substratum, and to the derivation of cognitive process from the organism’s sensorimotor experiences. (pg. 104)
In this way, cognitive processes are neither computational nor abstract mental process. They are instead intrinsically tied to the body’s action; moreover, while observing an object, the neural system is activated as if the observer were interacting with it. Adding deliberate gestures to peer-review demonstration or in a tutorial may inform writing center practice. An earlier study by Thompson (2009) looked at how a tutor’s ad hoc gesturing contributed to scaffolding during a conference. The implication is that gesture supports, directs, and informs the conversational content. Further research may prove rich and informative.

**Limitations**

The SE survey in this study had questions that were problematic. For example, I would remove the term *love* and replace it with *enjoy*. *Love* has many connotations. When coupled with peer review, I worry that the term *love* may create bias in answers, even though this did not seem the case for the study. As well, questions 9g and 9h are interchangeable but had different outcomes.

9h. Telling the writer how to fix their paper rather than listening to what the writer was trying to achieve.

9i. Listening to the writer explain unclear sections rather than telling the writer what I think she or he should do to fix it.

Responses to the first question were significant, yet the second, with reversed logic, was not. This double-bind question is the kind Bandura warns against in his protocols (see also Pajares, 1996). Apparently, respondents only read the first part of a question; once they feel the basic content is understood, they give their answer. The survey then should have had shorter, more concise questions, not compound ones. This issue would have been rectified earlier, but the initial statistical application did not highlight the variance. Only after the study had been completed did I see the incongruity in responses.
The numbering on the survey was improper as well. The instructor and I did not catch this error before hard-copy production. Yet, I doubt that the numbering impacted the responses of respondents. In hindsight, I believe factor analysis would be beneficial as well. Were the study to code for key terms tutors used in the presentation, and had students responded to pre and posttests as well as in their pre and post writings and the interview, I might have been able to make stronger claims about outcomes and been able to clarify understanding about treatment. Moreover, question #8, “a teacher taught me peer review,” was created to understand whether students had prior knowledge of peer review, but I discovered that given the autonomy of classroom teaching this question had no value. What constituted teaching peer review was far too vague. Students interpreted this question to mean had they done peer review prior to this class.

I had hoped to extend this investigation and garner more data. A larger sample size or comparable semesters might provide different information. Currently, the collaborating instructor and I have gathered two more semesters of data, but I stopped short of analyzing the data given the weaknesses mentioned above.

Contributions to the Field

This dissertation and these conclusions contribute in many ways to WC and writing studies scholarship. First, my study offers alternative ways of assessing WC efforts by replacing student satisfaction surveys with SE surveys (Schmidt & Alexander, 2013). WCs have struggled to find ways of proving effectiveness in one-on-one tutorials. More specifically, each tutoring session is different, and each writer is at a different level with different concerns; as such, centers are unable to create a measure that accurately and consistently captures significant data (validity and reliability), data that moves us beyond the descriptive “bean counting” data currently collected (Lerner, 1997). Using self-efficacy as a session tool has the potential to provide
statistical data demonstrating how and to what degree the tutorial affected student learning while making the writer more aware of elements necessary in text development. Utilization of this tool can support the practice of modeling and imitation, which can alter pedagogical possibilities. Its only drawback may be survey fatigue.

Moreover, modeling and imitation can also contribute to the fields of supplemental instruction, student engagement, and persistence. In addition, by facilitating positive in-class peer-review workshops, WCs have the potential to improve credibility within the academy and across departments, but especially within WCs’ own discipline of composition. Having tutors visit classrooms provides an opportunity to promote WC work, and, through such collaboration, change faculty misconceptions about WC work.

Fourth, this research contributes to institutional research regarding learned helplessness, student retention, and matriculation, and may well have a place in developmental education studies and professional development. Providing guided instruction and demonstration lowers the frustration levels of learners, allowing students to successfully master content and move ahead in education.

Most important, this dissertation leads any future study I may pursue, especially regarding gesture and how it may affect the learner in a tutorial. I have been curious about embodied knowledge since my early graduate classes with Dr. S. P. Witte. For me, the notion of gesture as a tool to positively affect cognition carries great implications for WC research. Having a clear theoretical understanding of cognition and writing processes can only better prepare me for future investigations and practices.
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APPENDICES
Appendix A
PR in class 1\textsuperscript{st} week student writings (fall 2013)

Prompt Question: \textit{What does PR or peer workshops mean to you?}

Student Response #:

#1: It means that someone will look over my paper and make corrections or suggestions to improve it.

#2: It means looking over my classmates work and helping them make it as good as it can be.

#3: When these words come to mind I think of other students and myself going over each other’s papers and making comments about them. I haven’t gotten a lot out of peer review in the past, but it is helpful sometimes.

#4: Peer review means to me that someone is able to see the hard work you put into your papers and are able to give good feedback or ideas to the writer.

#5: A peer review to me means that one person takes their work and uses it as a group review. So, one person work is evaluated with a discussion.

#6: To me means that I will be working with my peers being judged by them on my work.

#7: Someone looking over my paper to check it to see if I messed up on anything.

#8: Peer review to me is being able to share my work with my classmates. I am not really sure what I think of peer workshop. I have probably done it but I don’t’s know that that’s how its called.
#9: Peer review is when you read someone's paper and you look at the content and organization. I don’t know if I peer review correctly but I try my best to give the most accurate feedback as in not saying something that would make it worse.

#10: Peer review means having classmates review your paper and give feedback. I don’t like peer review because I prefer to have my mom or dad review my paper because they know me well. I trust them so it’s easier to let them read my writing. I don’t mind teachers reading it but have other students read my writing makes me nervous.

#11: It’s to see how my paper would turn out in a group of people or classmates, and see how my paper’s point of view react with the different readers.

#12: They are a way to help the student (me) to fix any errors or problems within my work. I love done peer review and workshops on people and work and peoples’ writing. People seem hesitant of them, but I think they only benefit you.

#13: It means that it’s going to help me with my writing and it makes me ask myself if my writing is good. Some people may not find it useful but others will because they need some help. It helps everyone become better writers I think.

#14: Peer review consists of two or more people gathering together to critique and review each other’s work and provide input on how they could better their work.

#15: To me means having other students proof read my work and make corrections. Peer workshops is working together with other students on a project.
#16: To me, peer review means having a classmate (generally someone you don’t know well) edit a writing assignment. They usually point out mechanical errors instead of really being critical. I try to be critical when I review a peer’s work because I think it more helpful to.

#17: (peer workshop) to work together to the goal of success for everyone. (peer review) to check others work so that they can get the best grade possible.

#18: Peer Review/Workshop thoughts?

Teacher: “okay class, today you’ll be doing a peer review with your classmates. . .”

Me (internally): oh god please no why would you do this to us I don’t know anybody here nor do I like them nor do I want to like them can’t you just read our papers yourself why why why?! (usually)

#19: when I think of the term peer review I imagine myself working with a peer having them read my writings and critiquing it. I assume that my partner will give me a non bias, honest answer. The term peer workshops, I assume, means that you work as a group and have multiple people critique your work. This way you can get many different opinions and viewpoints very quickly. All of this must be done in a non judgmental way and should be used only to help not hurt.

#20: Peer reviewing means to me is that you’ll be working with classmates on a paper of some sort and then they’ll be reviewing it and marking/writing some notes down on there thoughts or if something didn’t see write, they’d mark where it was.

#21: When I hear peer review I think of students reading my work and editing grammar/putting their thoughts in the margins for me to go back and think about. Usually I feel like the students add weird notes or don’t really try, and it’s weird for me to edit theirs because even if I have what I think is good input, how do I know if they’ll read it? Or worse,
what if they do and judge me for my thoughts? Peer workshops is an unfamiliar term, but it makes me think of any ‘workshop’ where you go to learn about more in-depth things about whatever the subject is.
Appendix B
Self Efficacy Survey (pre- and post-): How to do Peer Review

The following is a brief survey regarding Peer Review. As a writer among other writers, your ability to provide helpful feedback is invaluable. However, academic writers do not always know what to look for and what to respond to in another’s writing. This survey is to help us understand where you are in the process of becoming a strong academic writer and responder to other’s writing.

_What I know about Peer Review_

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<td>1.</td>
<td>I love peer review.</td>
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<td>O No/Never</td>
<td>O Rarely</td>
<td>O Some</td>
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<td>2.</td>
<td>I enjoy reading other’s papers and providing feedback.</td>
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<td>O No/Never</td>
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<td>3.</td>
<td>I enjoy others reading and providing feedback on my writing.</td>
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<td>O No/Never</td>
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<td>4.</td>
<td>I follow the advice of my reader/audience.</td>
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<td>5.</td>
<td>Other’s rarely follow my suggestions.</td>
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<td>O Rarely</td>
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<td>6.</td>
<td>I ask a classmate to read my work before I turn in my final draft.</td>
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<td>7.</td>
<td>I only ask my mother (or someone who knows me really well) to read my writing.</td>
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<td></td>
<td>O No/Never</td>
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<td>8.</td>
<td>A teacher taught me how to do peer review (or I have received instruction on how to do PR prior to this class).</td>
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9. *When doing peer review I can focus on…*  

<table>
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<tr>
<th></th>
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<td>A. Sentence level errors on the paper (grammar, mechanics, punctuation, typos).</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<td>B. The organization of the paper</td>
<td>O</td>
<td>O</td>
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<td>C. How strong or weak focus of the paper is.</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<td>D. If the writer provided enough support to validate his or her claim</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>E. If the writer provided enough descriptive evidence to make their claim seem reasonable.</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<td>F. When the quotations seem wrong or inappropriate, I mention them to the writer.</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<td>G. Pointing out when the writer misuses quotation marks.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<td>H. Telling the writer how to fix their paper rather than listening to what the writer was trying to achieve.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>I. Listening to the writer explain unclear sections rather than telling the writer what I think she or he should do to fix it.</td>
<td>O</td>
<td>O</td>
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<td>O</td>
<td>O</td>
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<tr>
<td>J. Tell the writer which section(s) I did not like in the paper and why.</td>
<td>O</td>
<td>O</td>
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<tr>
<td>K. See gaps in the paper’s logic and point them out to the writer.</td>
<td>O</td>
<td>O</td>
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Appendix C

In Class Writing Prompt

(End of the Semester/Portfolio Project)

Portfolio Questions

Please answer three of the following questions using your textbook, notes, classroom discussions and your own written work.

1. Explain what you have learned about what makes good writing over the course of the semester. What makes writing effective? Find examples of what you feel is “good” in your writing and explain how it makes your essay/work more effective. Choose at least three examples from your own work.

2. How has peer review influenced your writing? In what way have your incorporated or disregarded the feedback you received from peer review in your writing? What rules did you follow to develop your ability to be effective in giving peer review? What will you continue to use in your writing life regarding feedback for others?

3. Explain the writing process you used in developing one of the pieces of your work. Using your text and class notes, outline how you personally developed a draft from inception to completion, considering your audience, purpose, organization, development and revision. What changes did you make and resources did you use to make them?

4. Find examples of three literary tools or rhetorical devices in your own writing. Cite each example and explain why you chose it and what purpose did it serve to improve the readability and relatability of your essay. Be specific. Example: Flow is not a literary device.

5. Look at examples of your own writing. What piece of writing was most satisfying to write? What did you learn about yourself both as a writer and an individual in the process of writing? Feel free to share feedback about your writing process and/or commentary from me or classmates that motivated you to continue writing. Be specific.

6. Reviewing your work as a whole this semester, how would you define yourself as a writer? Rawlins suggests that all learning is relearning, and true learning, in many ways is re-teaching. What have you been re-taught this semester, and what have you learned for the first time? In what ways did you advocate for yourself, and in what ways did you rely on others (friends, writing center, classmates, teacher, textbook) to help you. Does your effort reflect where you feel you are as a writer? Your grade in the course?
Appendix D: Student Responses

Portfolio Responses for In Class Writing (Post)

Student 1:

When I think of peer review, I think of the 5th grade where I would hand my paper to my best friend and I would tell him to say that it is perfect. But for the first time this semester, I truly understood the purpose of peer review. I had seen many teachers attempt to carry out a good peer review session in high school, but it just never seemed to flow or work well[,] but this semester worked very well. Peer review has influenced my writing[,] but sometimes you can’t [see] some of the little things in your own paper, but someone else can point them out very quickly[,] and I like to see where other people are coming from and what they see in the paper that is good and bad that I might not see. I look over their comments on my work [;] sometimes I choose to go with something they said or stick with what I have [,] or maybe just change it [altogether]. It just depends on the situation. [...] I will always continue to edit with people because it really does shed light on things the writer missed or didn’t pick up on.

Student 2:

Peer review has influence me to look back at my writing work and make changes to it. The feedback I receive from the peer editing makes my writing smoother and a lot more understand[able]. I will continue to keep good flow in my writing.

Student 3:

Peer review was tough for me to open up [to] at first. I wasn’t comfortable letting one my fellow classmates read one of my papers and tell me what they thought about it. Then the first time I exchanged papers with someone I began to be really nervous. I felt that they were going to judge me off my writing and look at me different[ly]. But then once I received the feedback[,] it made me realize that having your fellow peers tell you [their] thoughts on your work is not a bad thing for you. It is like getting perspective of someone like you, but they don’t glaze over the paper like you would if [you] graded your own paper. Whenever I would get feedback I would [weigh] the option[s] I had. Look at what they said and look at what I said. This was good because now you have [two] different options on your paper. Options are good in life. Now when
I was giving peer review[,] I tried so much not to focus on the punctuation and spelling errors, and [I] focused more on the structure of the paper. I wanted to make sure they had an introduction, body paragraphs, and conclusion. With a bad structure [,] a paper can’t really go anywhere. So that was the first thing I would go look for. Second thing is I would go look to make sure they explain everything well [so] that the reader can understand it. Then after all that [,] I would go through and look for the errors they made with punctuation and spelling. And finally I would wrap it up with finding their thesis. I will continue to use peer review moving forward in composition. I believe it is a good aspect to improve your paper and make them very fun to read.

Student 4:

Peer review ha[s] really helped my writing overall. People catch thin[s] that I’d never see and[,] though some grammar and spelling errors make it through, my finished papers have a beginning and an end and a nice middle that builds the story well. Most [of the] time, I will take the advice from whoever review my paper. Mainly [I take the advice] when it concerns my thesis and introductions because that’s where I struggle the most. Personally I love peer reviews [:] I like to be able to read someone else’s work and have an opportunity to straighten out the kinks. The rules I followed when I peer review [were] don’t assume anything while reading, if a thought doesn’t seem finished, tell the writer, grammar is the last thing to worry about unless it’s horrendous, and don’t change the [writer’s] words.

Student 5:

Peer review has helped my writing by gaining another’s perspective on my writing. It has shown me how taking a step back can cause you to see small things, like typos, that you overlooked in the frenzy of writing the paper. I incorporated the advice given to me by looking at my paper in a different way and usually rewording a sentence or rephrasing a difficult section. I followed a step-by-step procedure, where I start with the body [,] then the intro[, and] then the conclusion. It shows me where their strong suits are and how [their] paper can start and end with a tie to the body of the paper. I will continue to give feedback and peer review. If someone asks me to, I would happy to do it as well [....]
I relied on [a student in the class] a bit to peer review, and to make sure my writing didn’t sound stupid.

Student 6:

What I have learned about good writing this semester is that even if it makes sense to me I always need to get [,] at a minimum [,] a second party and sometime a third to clarify that I am actually getting the point I want across [...] Peer review has influence my writing because I know when I read what I write it always sounds right even if it makes no sense to anyone else. My first peer review was an eye opener [,] and I ended up spending around an hour at the writing lab with a review. What I have incorporated from peer review in my writing is that I tend to try to cut my sentences off short for fear of having a run on and lots of thoughts in one sentence. Because of this[,] I now look for opportunity to allow my sentence to flow, but also look for areas where I have unintentionally fluffed up my paper and have drawn out a sentence that could be condensed and still get the point across. Rules I followed when giving a peer review were that I was going to go into a paper completely unbiased regardless of the topic. I also had to become slightly harsher as I am prone to be easy at reading and not really get to much depth into the individual[‘s] paper. This is also something that not only in peer review but also in my own writing I realized needed to be done, as I used to tend to think if I had written it[,] it was ok and did not need to be changed even though it probably did. [...] I relied lots on friends more than anything to help me with my writing [,] I have some friends who are close to graduating and have written numerous papers, and they often would peer review my papers. Sometimes it would be a quick skim just to make sure it flowed nicely and sounded decent, and other times it would be an in depth sit down to help with individual paragraphs and how to make sentences stronger with meaning.

Student 7:

My peer review has been very helpful in [that] it helped me make my essay more understandable. I would always know what my paper should be like [,] but I never knew how to put it into words. My peer review would always help me by giving [me] examples of what I could do, then I would go from those examples to write exactly how I imagined it.
Student 8:

Peer review has influence my writing by making me not be so afraid to let people read and critiqu[e] my work. They’re just trying to help me and it’s difficult for me to not think that the person criticizing my paper isn’t personally attacking me. I always hear what the person has to say about my paper [,] and when they give me grammatical things to fix[,] I always fix them because I’m terrible at that. But I don’t always follow their advice on sentence structure or how my sentences are worded. I will always try to remind myself that when I’m getting help from somebody that they’re not attacking me or my paper but that they’re just trying to help.

Student 9:

Peer review has been amazing for my papers. I like getting other people’s thought on it, and I can change for the better. I’ve incorporated feedback from peer review in my essays such as: giving more detail on a matter, making something more clear or making my thesis stronger. To be more effective at giving peer review [,] I’ll use a grading rubric. When I’m reading the paper I look for several things. Regarding feedback from others in the future, I’ll definitely keep an open mind and take [their] comments seriously and [not] just disregard them [....]

I [wrote] a rough draft. I later had a classmate read it because I was second guessing myself. I about [threw] the essay away but before that could happen [,] the classmate told me it was really good. I went ahead and fixed a few things [...] and when] I turned the final copy in, I was actually really pleased with it.

Student 10:

Peer writing has been very beneficial to me in several ways. They might see something that I missed on accident, like a spelling error. The people that I worked with have been very helpful. Some ways that I incorporated their feedback into my work are: expanding my thoughts, grammar/spelling mistakes, and different wording that would fit better. When I peer review with others, I always make sure to be respectful and to never judge someone else’s writing. I also make sure to correct their paper and give good feedback, but I make sure not to over[do] it. I feel like over[doing] it is harsh and it might make the other person feel bad. Another rule I follow is to not say what they’re doing wrong too often, but to say a lot of good things. You don’t want to
come off as a rude person. I’ll continue to use peer review in the future. I think it’s a very helpful tool!

Student 11:

Peer review has influence my writing [greatly]. In high school, I never really got my papers review because some teachers didn’t make it a requirement. Now that mine were peer reviewed I noticed how much better my scored got. It is always nice to have someone else’s opinion on your writing because they may point out things you would have never noticed. I usually always incorporated my feedback given because it always [had] good ideas. [A student in the class] was really good at peer review and she always pointed out good things that I could do. There may have only been one or two times where I didn’t do what she said. She was critical not harsh. When I peer reviewed [,] I always thought about the advice that I would be glad to receive. If I thought something the person said was good [,] I would let them know. I made sure the papers made sense and fulfilled the requirements. I tried to catch everything I could that wasn’t exactly “right.” I didn’t sit there and search for where commas should be. I looked to see if the organization was proper and made sure they had the evidence and support they needed to make their claim seem more valid. For my future writing career I will always allow people to peer review my work and allow others to do the same for me. I will always let people know if something sounds right or doesn’t. I even may use it in my career someday [,] depending on what I do. In this class I really did learn how to peer review. In high school they didn’t teach us how to do it that well. Now when I have kids one day and they need me to look at their papers [,] I’ll hopefully know what to look for [....]

[A student in the class] had told me to make sure I read my sentences out loud to make sure that it sounded right because it didn’t always make sense[,] and that helped me on this paper as well as others.

Student 12:

Good writers learn and take help from people. They learn to take advice from people along with learn more about themselves and the world around them as they write. Peer review is one of the most helpful steps in the writing process. Writers also learn more about themselves [....]
Peer review was a huge help for me [:] I had never really done it before this class, but it help[ed] immensely. I took every criticism and encouragement to heart and always used it with the mindset to improve my writing. Peer review encourage us as classmates to discuss our writing and help each other along the way. It also challenged me to take a deeper look into my own writing and to look for ways for my fellow classmates to improve theirs as well. Looking for grammatical problems is good, but looking for flaws in the flow and organization of the paper is just as important.

Student 13:

I think that peer review has influence my writing in an awesome way. More often than not, I do incorporate the feedback into my assignment. I only disregard feedback when I strongly disagree with it. I am very receptive to feedback and I love getting it. I know I am not a perfect writer and I am always looking for ways to improve. I always self-edit my papers [,] but sometime there are things that I miss and it is really helpful to have a second set of eye to look over my paper and find those mistakes that I miss. Whenever I get grammar or spelling corrections I always fix those right off the bat[,] but when it is something about either organization or content then that is something that takes a little more thought for me. My teachers in high school never really outline what peer editing was for me so I always just corrected topical things such as grammar and spelling. [The instructor’s] class really helped me to understand that peer editing was so much more [than] looking for misspelled words and misplaced commas. I helped build my ability to give effective feedback by reading the chapters in *Writer’s Way* and listening to the advice given in peer review.

Student 14:

Overall, I think peer review is a good thing. It allows for you to see someone else’s point of view of your work and really helps to point out the flaws that might not be so clear at first. I think I did a decent job of incorporating my peer reviews into my finished draft. I definitely used all the rules and things we learned in class to help me make good effective comments instead of comments that are dull and would not have helped at all. I think it is always a good idea to consider the comments and suggestions of others [,] and I will continue to do so in everything I do in my life.
Student 15:

Working with [a peer review partner] in peer review this semester was such an awesome privilege. I learned so much from her this semester in little things, as simple as punctuation rules, and in big things, such as organizing the paper as a whole for a better flow. We peer review over one of each other’s papers and became very comfortable with being completely honest about different aspects of our writing. I incorporated nearly everything that [my peer review partner] would point out to me, mostly because it made sense what she had to say. Whether I had simply overlooked what she would point out, or she pointed something out that I had never even thought about before. There were a few things I tended to disregard, and those were simply stylistic changes. But even having those things pointed out to me was very interesting. I tented to try and stay away from other people’s stylistic choices, and mostly focus in on questions that were left after I finished reading [-] flow, grammar, and spelling. I believe that in peer review, that is my job. I’m not there to change every little thing the writer says, but to offer guidance. I believe that my views and efforts on peer reviewing worked well this semester, and I plan to stick with them. Maybe I’ll even keep emailing my papers to [my peer review partner] for peer reviews in the semesters to follow.

Student 16:

Peer review was very helpful for me. I really appreciated someone else reading my paper and helping [me] pick out stuff that I missed or need[ed] to explain more clearly. When I had my first paper reviewed by the writing staff, I’ll admit that I was a little nervous. I didn’t know what to expect. As each of them came up and told me what I did wrong, I was a little discourage. But, with so many people reviewing my paper, it got a lot better. I looked at everyone’s comments and changed a lot of my paper. It was also interesting how a lot of them suggested the same things [.] highlighting the concepts I need to watch out for next time. As people have given me suggestions on what I should change in my writing, it has shown me what I need to help others with when someone asks me to review their paper. There is so much more to look for [than] just proofreading [.] there are thesis statements, conclusions, and making sure everything flows properly. I now know what to look for [.] and I think that has positively affected my own writing as well [....]
After [the instructor] and a few other people read [my essay] I had to take the comments I was given, and get rid of half of my paper without leaving out all the details that made it interesting. Instead of searching for information and putting in every little detail to try and meet a word count or page number, I had to reconsider every sentence and ask, “Do I really need this to tell me the story?”

Student 17:

Peer review was one of the best things in this class that helped me learn to be a better writer and to also help others with their work. With peer review in this class I had many classmates look at my work and gave me great feedback about my papers and the biggest thing I learned most was if they got excited at the hook or said it got them excited to find out what was going to happen it made me really happy to know I put great detail into it but if it didn’t it pushed me to work better on it to show what my paper was about. Also with peer review it showed me that I can be a good editor and help my peer and myself with making better papers. I learned how to make correct sentences and when to make them the correct length and with the write punctuations and other things to make it a correctly written paper. With peer review it will help me in the future classes with helping other and myself if making well written papers and also helping me with correcting rough drafts and final editions of papers to look great. After writing [?] I really enjoyed peer review with this paper with all the same reactions from all my peers saying they all got really excited when I was able to hook the bass and made me excited to keep writing and to show more detail to make it a better paper.
### Appendix E

**Self-Efficacy: Raw Data Tables**

**Pre-survey**

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Appendix F

Matching Pre and Post Student Identifications

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At the beginning of the semester, students were informed of this research. All were told that any information would be voluntary. 35 students were in attendance the day the survey was administered. 33 students provided ID numbers (3 opted out or were absent). At the end of the semester, 29 students supplied ID#s with four not matching.
## Appendix G

### Paired Results

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### Yellow highlighted p-values indicate significance. Purple shows data nearing significance.
Appendix H
Bar Charts Illustrating Significant Movement
Affective Questions

The number zero indicates no movement in responses after treatment. Positive movement in responses moves to the left, negative responses moves to the right.
Appendix I

Transcript of Focus Group
Student 1: And then my family came in town ‘cause I graduated on Friday, so that was kind of fun.

Student 2: See, I graduated, but I didn’t go to the ceremony. (laughs)

Student 1: Did you really?

Student 2: Yeah, I didn’t go.

Student 1: You should have gone [student 2], it’s fun.

Student 2: I don’t know

Student 3: It’s important! (laughs)

Student 2: I’m more looking forward to the graduation ceremony for the bachelors, you know?

Student 1: I’m walking for all of ‘em. I’m doin’ the work, I’m gonna walk for all of ‘em.

Student 3: Yeah, why not?

Student 2: Yeah, ‘cause remember I told you about my illness. I never went to my senior, so…

Student 1: I didn’t have a senior one ‘cause I went to bible school.

Student 2: I was never able to go because I was too sick. (laughs)

Instructor: Okay friends. While you…

(overInstructor ping conversation)

INSTRUCTOR: Please eat pizza because otherwise…

Student 1: You’re going to be taking it home?

INSTRUCTOR: I don’t eat pizza.

Student 3: Well your children will be hInstructor py.

INSTRUCTOR: I do have a non-pizza eater.

Student 3: Oh my goodness. That never hInstructor pens.

INSTRUCTOR: I know. Isn’t that weird? I always think there’s something wrong with a kid who won’t eat macaroni and cheese or pizza. Like really? You have some kind of genetic--
Student 2: My parents look at me the same way. I don’t eat hot dogs or hamburgers so.
(over Instructor ping)

INSTRUCTOR: Well that’s normal in my book. Seriously.

Student 3: I have a cousin who doesn’t like chocolate. He won’t touch anything chocolate. I
don’t know where he came from.

Student 1: That is just wrong. (Indecipherable)

Student 2: I don’t usually eat meat with bread.

KB: I used to live with a woman whose son would not eat bologna but he would eat hot dogs,
and I had to explain to him over and over that they were the same exact ingredients. (Laughs)
Just one was cut differently, and he was like “No, no.”

Student 2: It’s a mental thing.

KB: One day I got him to read the ingredients, and he started crying. (Laughs) He said, “I can’t
eat hot dogs” and I said, “Why don’t you just start eating bologna? It’s the same thing.”

INSTRUCTOR: Kathryn, you made him cry? Over a hot dog?

Student 2: I just never ate it ‘cause I was a little kid and just didn’t like the taste. It’s just stuck
with me ever since

KB: My hat’s off to you

Student 2: (laughs)

INSTRUCTOR: Okay, so, um, we have some questions we wanted--there’s a reason why we’re
here other than eating pizza.

Student 2: Really?

INSTRUCTOR: Um, you know that over the semester we had you, um, do a pre- and post-
survey.

Student 3: M-hmm

INSTRUCTOR: And part of the reason why we wanted to --
(phone rings)

Student 1: Oops

INSTRUCTOR: Do a focus group is so that we could better understand the results of our survey
because some of the answers raised more questions. So, um, I’m going to ask you some
questions, and then if you could just all feel free to share or, um, add to any of these as we go along.

Um, the first question is, “before this comp course, how did you, or did you identify yourself as a writer?” And what type of writer? Strong? Weak?

Um, how would you identify yourself as a writer prior to the class?

Do you want to start [student 1]?

Student 1: Yeah, I, I identified myself as a weak (cough) writer. I always felt like I was much better at communicating verbally. Um, I didn’t think that I could translate my thoughts well on paper. Um, so that, that’s how I felt prior to coming into this course.

INSTRUCTOR: Okay

Student 1: Exiting the course I realized that I, I do very well putting my thoughts onto paper. As long as I write like I talk.

Student 3: Mhmm

Student 1: If I can make that connection of writing (clears throat) as I speak (clears throat), then it comes out okay. Otherwise it’s pretty much gibberish.

(laughs)

Student 3: Gibberish. I like that. (laughs)

INSTRUCTOR: Okay…[student 2]?

Student 2: I was actually going to say that yeah, probably writing’s my worst subject out of everything ‘cause I’m not very good either verbally or… I just have a hard time talking overall. Trying to put it into words and stuff like that. So (laughs)

INSTRUCTOR: Okay.

Student 2: But as I took the course and stuff and be able to have revision, I, um, I guess I’ve gotten lots better at it, so…

INSTRUCTOR: Absolutely. Okay. [student 3]?

Student 3: Um, I think that in high school and everything I thought of myself as an al-- I mean I thought I was okay if I worked on it. I could usually, you know, get the grade that I was aspiring to, but I think this course helped realize that, um, I can do better if I, I enjoy writing more personal things, like our “Who Am I?” I think I have a hard time writing things like research papers and things like that because it’s more clinical and not personal. I think when it’s
about me I can write about myself as I speak as I, you know, like you said--it gets on paper better. But when I try to do research pInstructor ers and things like that, I have a hard time with that. But I think that, um, the course helped me differentiate between the two and realize when I need to try a little bit harder at certain styles of writing.

INSTRUCTOR: Okay. (inaudible)

Student 4: Um, beginning this course, I wasn’t the greatest or strongest writer, and, um writing isn’t one of my strengths. But, um, I really like the course because it targets the different types of writing. And I find like that I’m better at some types of writing than others. Like informative writing versus, like, creative and personal writing. And, um, ma-- mainly because I just have trouble putting my ideas down, and I think the course really helped me just like to how to put things down from your mind and to structure it properly, and what you’re trying to specify what, um, the main idea is to clearly state your thoughts.

INSTRUCTOR: Mmm. Any other thoughts on that question? Okay.

(laughter)

INSTRUCTOR: Just want to know.

Student 2: Actually, to give you an idea of how bad with speech is as a little kid, uh, I actually talked backwards.

Student 3: Oh my.

Student 2: Like, uh, “Home I go.” I would talk like that, so they, so my parent would always make a joke with me saying that, “You were born into the wrong family. Should have been born to a Spanish...speaking family.”

(laughs)

INSTRUCTOR: Do you still do that.

Student 2: All the time. Oh yeah.

KB: You know I do that too. I still do it. The doorbell and the bell door. I call it a bell door.

(inaudible)

Student 3: My mom does it.

Student 2: And I just, I just had a really hard time speaking all the time when I was little, and my mom took me to multiple speech therapies and stuff like that. A lot as I was growing up, so…

KB: So do you, do you equate writing with speech?
Student 2: Um, well with, yeah, how I think in terms of yeah, ‘cause I always like to start backwards and stuff like that when I write sometimes. So, that’s how I am.

INSTRUCTOR: So you start at the end?

Student 2: Yeah. Sometimes, yeah.

INSTRUCTOR: Which is not necessarily a bad way to go sometimes.

KB: I start in the middle of the sentence and work my way out.

Student 1: (overlapping) ‘Cause sometimes it’s hard at the end. You start with the body and get to the end, and you’re like--

Student 3: What do I do now?

Student 1: (overlapping) Now what do I do?

(laughing)

Student 3: Yeah.

INSTRUCTOR: Yeah. Some peopleizzle.

Student 3: Mhmm.

Student 2: But taking the writing course and being able to plan it out, and being able to go through it in class and how you helped us, it’s a lot better where I was able to now start from the beginning and work through.

Student 1: Yeah, the segments, the teaching (inaudible). I think the biggest learning thing for me was content. Worry about content; don’t worry about grammar.

Student 2: Mhmm

Student 1: You can always go back and fix grammar, but if you don’t get the content down, then the grammar is kind of a moot point. So, (clears throat) that kind of gave me freedom to express myself. But I don’t--in --I’ve taken courses in English comp prior at this college and it’s been more grammar, grammar, grammar, grammar, grammar.

Student 3: Mhmm

Student 1: Whereas the courses I’ve taken now are more content, content, content. We can teach you about grammar, but content--we want to focus on content. Which was really freeing because then you get that ability to write just freely, not be so worried about what you’re--where you’re putting a comma or a hyphen or whatever. And so that was helpful to me.
INSTRUCTOR: Good. Well, this kind of leads to maybe one of the next questions. Um, the
survey asked if you liked peer review, and the response from pre to post was negligible. But you
said you were indifferent at the end of the semester, and you seem to like it post surveys a little
less than you did when you started.

Student 3: Oh.

INSTRUCTOR: Do you think you could?

Student 2: I don’t know. I think for mine I actually liked it a lot better.

Student 3: I agree.

INSTRUCTOR: Okay.

Student 2: That was for me. I don’t know if that was because the whole class was totally
different. Was that like class overall, or was it us personally?

INSTRUCTOR: Not individually.

Student 2: Okay

INSTRUCTOR: But, um, just the survey results showed that, um, it seemed, just marginally,
that people were less into it. They seemed to enjoy it less

Student 3: Hmm.

INSTRUCTOR: Do you think you could shed some light on why that might be?

Student 3: I think that I--it--the course liked--made me like peer review a little bit more I feel
because the only experience I really had with peer review prior to your class was high school
obviously. And I think that, um... (turns to 4) We both had Mrs. (inaudible), didn’t we? [...] she
did do some peer review, and I think that a lot of the kids are, um... You know, it’s high school,
so it--they’re not exactly helping you per se. Like they’ll read it, and they’ll fix your periods and
your commas and that’s it. You know what I mean? Like they don’t really, um, look at the
content of your paper and make serious, um, suggestions. So I think that your class, um, the
people that edited my paper and things like that tried to really help me. And they did truly want
to help, you know? And I did the same for them. So I think that if you have some--a partner who
is willing, I liked it a lot more.

INSTRUCTOR: Okay.

Student 3: Just because the experience in your class was so much better than what I had had in
high school.
Student 1: Yeah, I would have to agree. I, I think that starting out at the beginning of the semester I was not a very big fan of peer review.

Student 3: No.

Student 1: At all. Uh, because it’s been such a negative process previously. And this was such a much more positive, you know, not--it was presented in such a manner that it wasn’t...You’re not tearing them down. You’re helping them become better.

Student 3: Mhmm

Student 1: And then you show them how you’re making them become better. you, you tell them, “If you were to change this,” somehow that flow changes, and so that, that helping that, that camaraderie. Like you’re not, “You did this bad.” It’s like “Look at what you did great. This is how you can make it even better.” And the way it was presented I think made a big difference to me. And, and my peer review was awesome. I have to say that I loved it when the writing center came in and their peers did peer review because it was an example, you know.

[turns to student 2]

It was an example of how it should be done correctly.

Student 3: Mhmm

Student 1: And that helped me because I’m a hands on learner, on how, uh, to do it more effectively. Um, and plus it just, it really bumped my paper up. I mean, I feel like my paper after peer review was much better than it was after--before. You know? And I could see it. I could see the change, and I could see what they were talking about.

Student 3: I think maybe that’s part of the problem is we don’t--some of us don’t really understand, um, how to give a peer review. We read it and we fix the grammar. And then we’re like, “I don’t know (inaudible).” You know? Like you don’t really feel like if you give them too much criticism that you’re going to hurt their feelings.

Student 1: Right.

Student 3: But if you don’t give them enough then you’re not helping them. So I think sometimes, uh, like when I was in high school I, I especially didn’t know how to help them constructively, so. And your class did help a lot with that.

Student 4: Um, my prior experience with peer review, in high school, was, um, I would say terrible.

(laughs)

Student 4: Because--
INSTRUCTOR: Did you say terrible?
Student 4: Yeah.
INSTRUCTOR: Okay.
Student 4: Yeah, so, um, because my, um, partners would always just write really simple comments and just put, like, “Awesome, dude” on my peer review. And then I’d just be done with it.
Student 3: Yes.
Student 4: And then, um, I guess starting with comp I really started liking peer review. And I’ve--I liked it since then. And, um, I think I’ve had a great experience here with peer review, and I’m actually baffled with the results of the survey.
Student 3: Yeah. I don’t understand.
Student 2: I really don’t, I mean...
INSTRUCTOR: We were too.
Student 3: I don’t understand.
Student 1: I don’t understand that either because everyone that I talked to was a big fan of peer review.
Student 3: (overlapping) Yes. They enjoyed it.
Student 2: Except for XXXX.
Student 1: Well, XXXX wasn’t a big fan of a lot.
(laughing)
Student 3: Well.
Student 1: I love XXXX, and XXXX’s awesome, but he was there because somebody told him he needed to take that class.
Student 2: Yeah.
Student 3: Well.
Student 1: It was all about perspective for him.
Student 3: Yeah, that’s always a factor. If you don’t want to be there, you’re not gonna like it, right?

Student 1: Right.

INSTRUCTOR: Well this is a follow up then. Cause your answering some--a couple of other questions. The third is, “Do you find value in doing peer review?” And I’m assuming that the answer to most of you is yes.

Student 3: Mhmm.


INSTRUCTOR: I have a follow up about--since we’ve brought up, uh, the modeling from the writing center. Do you feel that models coming in to help students should be done more than one time? Earlier? What would you have suggestions about introducing that--those writing center tutors earlier in the semester? Or more than once? Rather than at the beginning, sort of at the beginning, and at the end.

Student 1: I would, I would say that it would be more effective to have it, like, at the beginning.

Student 3: Mhmm

Student 1: And then maybe in the middle. Because at the end, what are you gaining by it at the end?

INSTRUCTOR: Okay

Student 1: I mean really, you’re already swamped by the time you get to the end of the semester, and so that whole process of trying to learn something newer… But having it modeled at the beginning, the very beginning, and then having it reinforced halfway through the semester I think is very effective. At least it would be for me. I can only speak for myself on that end.

Student 3: I agree. I think in the beginning, obviously it would show you what you need to aspire to do. And in the beginning it would definitely help those of us who are not quite there at the beginning, who are still, like, not paying attention enough, you know? I guess, it still would be helpful I think maybe at the end, but maybe not as helpful for that specific course. It might help you later down the road, but …

INSTRUCTOR: Okay. (inaudible)

KB: No, I, I was gonna--let me, so, ha- having done all this peer review, and, and you say you find value in it, when you go to your next class outside the English department, will you do peer review?
Student 1: I, I did.

KB: Or do you see yourself writing papers in isolation again?

Student 1: I actually did peer review on some of my papers outside of English comp. Like I had papers in two other classes, and I, I would give them to one of my--you know, one of my classmates and say, “Hey can you read this and tell me if it makes sense?” You know, I mean, and so they were really good about maybe providing feedback.

Student 3: Mhmm.

KB: How about the rest of the group? Do you, do you see yourself doing peer review for other papers in other courses?

Student 4: Yeah, um, I found the writing center very helpful and everything. And, um, when it comes to different subjects that I’m not strong in, I think that it’s very helpful. Like I used it to write my lab reports last semester and to help construct my paper because… Um, so it helps me follow through with my work.

KB: So that was my follow up question. If you see yourself doing peer review, who do you see yourself going to? Classmate? Your mother? Your brother? Your sister? Your roommate? The writing center? Who do you see yourself going to?

Student 4: Classmate and writing center

Student 3: Mhmm. Definitely not parents (laughs)

Student 2: Actually, sometimes I’ll communicate with my teacher. I’ll just, I’ll go to them first and ask what changes or what do I need to add in. And then I’ll go to, like, my aunt, who is very precise with writing and stuff. And try to have her help me make it more readable.

KB: And why not one of your classmates or one of the writing services if you go to a four year institution?

Student 2: Um, sometimes I’ll go to my classmates, but knowing, like, what the snow days that we had and stuff like that, they were talking about how swamped they were with homework and stuff like that. I didn’t want to try to--

KB: So it was an accessibility issue?

Student 2: Yeah.

KB: Okay. Alright.
Student 3: I think I have to feel pretty comfortable with someone also before I will give them my
pInstructor er, simply because, again, I just don’t want the “I fixed your periods and your
commas.” Like I want someone who I can trust to tell me if it’s awful.

Student 1: Right.

Student 3: So

Student 1: Yeah, I would agree with that. I think the writing center--

Student 3: I think it’s a big trust thing.

Student 1: Yeah. I think the writing center is… I used the writing center a couple of times, and it
was very helpful to come in here and get some feedback. Um, and the instructor. Because the
instructor--every instructor is different in their expectations. So what I learn in one class is not
going to transfer on to the next class. So checking with the professor kind of gives me an idea of
what the expectation from them is. And then I can always use the writing center to reinforce that
or my classmates to help me. Once I know what the expectations are.

Student 3: Definitely I ask my professors, but sometimes I don’t think of it as peer review, I
guess. I just think of it as, as checking with my teacher
to make sure I’m not like totally bombing
the assignment.

(laughs)

Student 1: That’s true. You wouldn’t necessarily go for…

Student 3: But yeah

INSTRUCTOR: Expectations?

Student 3: Mhmm

INSTRUCTOR: Um, you, you kind of answered this, so I’m going to skip ahead. Do you feel
like you got enough advice from your peer review partner? And why or why not? What were the
strengths of the advice you received and what were the weaknesses? You all admit that you liked
it, and you seem to have chosen well.

Student 2: I liked Marsha’s feedback that she gave me for my paper about, uh, how to conform it
and how to make it shorter and be more detailed in certain areas of my paper.

INSTRUCTOR: Alright.

Student 1: (Whispers) Thank you [student 2]

(laughs)
Student 1: I, I liked that too because, you know, the flow. Like the one thing that was pointed out to me was the flow. What I feel is a good flow, I’m not going to recognize maybe where to put commas, or where to--what to (inaudible) and not understand why they were there. I think that was a big thing for me. Why do I need to put a comma there? And [student 4] was helpful to me when he gave me feedback to me, on it breaks up the flow. Like it, it--because otherwise you don’t--cause you said to me when you read it, it’s way different than when I read it. And then wh-- and then wh-- and then I was like, “Oh, because I’m not putting those natural pauses in there that a comma would bring.”

Student 3: Mhmm

Student 1: So that was huge to me. That was very helpful.

Student 4: Um, my partner was Philip, and (inaudible) he basically targeted, like, what he thought of my paper and my, um, what was my point, and what he--what his idea of my paper was. And because it’s my writing, I usually can’t see, like--it’s like, um, I hear my voice all the time, and I’m, like, neutral to, like, what I hear when I read from my paper. And I have to have someone else to read my paper to see what they perceive from it. And, um, it really helps because, um, I can’t see some of the mistakes I make in my, um, in my work because it’s just my voice coming out. And when I read it out loud, a lot of times it sounds like it’s okay to me, but it might not be okay to someone else.

Student 3: Um, I--my partner was Jessica, and she’s one of my really good friends, so maybe we just talked a bit too much, but I just like sometimes we just needed a little bit more time for me to accurately tell her, maybe, my thoughts and for her to do the same. Simply because I don’t like writing down my corrections, and because, um, if I tell her I think I can verbally explain, um, what I think she needs to do or a thought or something rather than write it at the bottom of her paper. So, sometimes I just felt like we didn’t have enough time to help her as much as I would like.

INSTRUCTOR: Okay. Um, what were you looking for from peer review? And what did you get that you did not want? And what would you like more of?

Student 2: Can you read the question again? ‘Cause…

(inaudible and laughs)

INSTRUCTOR: Sure. What were you looking for, or, in the future, what will you be looking for in peer review?

Student 1: I think in the beginning I wasn’t--I had no expectations.

INSTRUCTOR: Okay.
Student 1: Right? So I mean it was like--or I mean the expectations I had were not, like, of the best, of the best quality. So I was pleasantly surprised.

KB: What do you mean by that?

Student 1: Well, it wasn’t a negative process. When you think of peer review, you think of being judged. I mean that’s what you’re thinking of, right?

KB: Even though you’ve had peer review in comp I and you’ve had peer review in other classes?

Student 1: We didn’t really do peer review in comp I as much.

Group: No

Student 1: I mean, really not so much.

KB: Really?

Student 3: I mean I--she suggested it, but we never took class time to do it.

Student 1: Exactly. It was expected to be done outside of class.

Student 3: It wasn’t formatted the way your class was.

Student 1: Yeah. I mean it wasn’t incorporated into the class.

Student 3: It was suggested. But, I mean, finding someone--

INSTRUCTOR: What did that mean to you? We’ve--in--you wrote about it at the beginning of the semester, but maybe we can recap that. What initially when you heard, like what you said, [student 3], peer review, you, you equated that with someone’s going to judge my writing.

[tape 3]

Student 1: Right

INSTRUCTOR: What did that mean?

Student 1: Well, I was negative. I mean, writing’s personal. Especially when you’re writing a “Who Am I”--

INSTRUCTOR: Right

Student 1: So, for you to tell me that who I am is not really what it’s supposed to be--it’s not--it’s who I am. You know? So for you to make judgment against who I am, it’s like, it’s a personal thing. So, um… But when I realized it wasn’t, it wasn’t a judgment on what I was writing about-
-it wasn’t even a judgment about how I was writing--it was, it was simply a, a suggestion. It was very much a--and the positives. The positives, you know. Given the positives. It was expressed to us numerous times [to] give the positives, you know. Not focus on all of the negatives. Tell them what you liked about the paper. Tell them what you think they could make better about the paper. You know? Um, focus on content and then focus on, you know, maybe, you know, commas and periods and whatever. But look at transitions, you know. How are they transitioning from one paragraph to the other? How does that flow throughout the paper? Is there a controlling-- I mean there was so much I learned in this class that I had not learned before that is, yeah. It’s been great for me because I’ve been able to take that into other classes, you know, and say, “Okay. This is my thesis statement.” You know, this is what I need to present in the body of my paper, and then I need to write it up… You know, I mean, you just don’t sometimes learn that necessarily. Like, you know--I don’t know how to express it. It was just different.

(Student 3: I always thought peer review was just scary. Like, it is. It’s like your peer just judging you, and I don’t know, I guess I just have had bad memories of those from high school. And like, you know, just like the awful, mean guy sitting next to you who has to read your paper, and he doesn’t want to. He’s just doing it because he has to. He doesn’t want to help you; he’s just doing it because the teacher said he has to. And I’m like trying to--you know, I’m like when you write a paper , I think most of us just try to put effort into it. We try to make it as best as we can, and then someone just sits there and picks it Instructor art. It’s kind of scary, and, um, humiliating. (laughs) But I think in your class--maybe it was just your class--but I think I got really lucky. It was a really great group of people, and I feel like everybody was willing to help, and they were all nice about it, and they wanted to help you. Even if you--even if they were only doing it because you said that we had to, they still had a good attitude about it.)

(INSTRUCTOR: Well, it’s because I’m awesome (truth))

(Student 3: No, but really… No, but really I feel like I did get lucky in my class though. I liked this class a lot.)

(INSTRUCTOR: You’re all great people.)

(KB: So can I ask, if we taught you how to do peer review and that, that everything that we did helped you, is there anything you can think of that maybe you’re walking away and thinking, “Hmm I would like to have known a little bit more. I would like this or that emphasized”? Or I thought, “This or that should be, should have been emphasized.”)

Do you feel complete with your knowledge about peer review?

(Student 3: Mhmm)

(Student 2: Yeah, I think so.)

(Student 3: Maybe just because we don’t know what else we’re supposed to know. But I mean, I feel like--
KB: It’s kind of like apples and oranges. If you’ve never had an apple, how do you know what an orange is?

Student 3: Right. I mean, I feel like we did everything, and we know everything we should, and we can do it again accurately.

KB: And you will do it again?

Student 1: Yeah, absolutely.

Student 3: I hope so.

Student 1: Yeah, and I think that I was lucky because, you know, I was crazy and volunteered my paper. First one out of the barrel to be peer reviewed by the writing center. And so, for me to see that behavior modeled of how they did--like how they broke it up and how they presented it and how they went through it with me--made it better for me because then I was able to take that model behavior and, and pass it on to [student 2] or whoever else’s paper I read throughout the semester. So I was really grateful that I had done that. Like I’d--it was risky for me. And I felt, when I came in, you didn’t tell me I was gonna be in front of the class and we were going to read my paper. She di--(inaudible). So I had no idea, but at the end I was very, very grateful because it was behavior that was modeled for me that I was able to go, “Oh, okay. That’s what it’s supposed to be like.”

KB: Note to (inaudible). Keep that in a secret place.

So the modeling helped you to see--did it help you to know that there’s not a right way to do it and you’re going to get different answers from different people?

Student 1: Yeah. Absolutely.

Student 2: Yeah.

KB: Did that help a lot?

Student 1: Yeah, that there’s different styles and that your style is okay. Your style may not be like somebody else’s style, but, but the things that you’re presenting is what you’re telling them, not how you’re telling them necessarily.

Student 3: I think that helped me be a little less intimidated as well because previously when I had peer review I thought that if they gave me feedback then I had to use that feedback.

Student 1: Yeah.

Student 2: Yeah. That’s true.
Student 3: Like if they give it to me I thought, “If they see it that way, then everyone sees else that way. And my way that I see it is wrong.”

It’s not I have to use it, you know? And I don’t.

Student 1: And that was, that was, that was phenomenal I have to say too.

Student 3: And I guess I knew that, but I just didn’t know that. Does that make any sense? Like I guess I knew but…

Student 1: And being able to stand up and say why, like “I’m leaving this in because this adds this to this.” And I know that maybe you don’t see that, but this is what I’m trying to get across in my paper. And then they were like, “Oh. Okay. That makes sense.”

(laughs)

KB: So, so let me (inaudible) something at there. If you go to take your paper, and you’re revising it, and you’re moving along, and have gone to several other different people for feedback, and you decide that you want different parts of your texts edited, and you go to your teacher, and your teacher says, “I want to move it,” do you feel more empowered or more inclined to say, “No. I’m leaving it like this because I like this. And this is why I’m doing it”? Student 1: Absolutely.

Student 2: Yeah.

Student 3: If I have a reason. Like if I can tell her why, then yeah, definitely.

KB: Right, right. Does it--would you, would you all agree that it, that it would give you more sense of authority over your own paper in front of--in the face of your own teacher?

Student 1: Yeah, I think it empowers to say, “Look, I-I’m standing up for my writing. This is why I’m leaving it in there.” If you can give me a good reason why it shouldn’t be in there, then we’ll--maybe I’ll consider it, but this is, this is you know, this is why I’m going to leave it in there. Because this is the transition. Because you want me to write four segments of this bad boy, and I need to, I need to --

Student 3: So true!

Student 1: I don’t wanna. No, because if you end the paper it’s like, “Well what am I going to do for the next segment,” because you don’t leave yourself a segue. And so, so when I left myself a segue into the next paper, I, I didn’t feel like I’d closed off that door. Like I could continue on; there was a continuation into the next paper.

Student 3: I don’t know if I feel quite empowered to stand up to my teacher and be like, “No! I’m leaving it!” But I definitely feel like I could tell a peer that. That this is why I want it in
there, and just because you don’t like it doesn’t mean I have to take it out. So maybe I’ll get there. The (inaudible) teacher (inaudible) me. It’s still a little scary.

Student 1: Yeah, probably I’m older than most the teachers, so that’s probably (inaudible)

(laughs)

Student 3: I don’t know. I’m just not very good at saying no to a person of authority. I don’t know why, but I’m not. (laughs)

INSTRUCTOR: Um, that’s good stuff

(laughs)

INSTRUCTOR: Uh, how do you know if other people follow your suggestions in peer review?

KB: On, on the survey you all seemed to say people followed my suggestions. There was, there was movement on that. We were curious how you knew that.

Student 3: Uh…

Student 1: ‘Cause we shared paper s. Like yeah, I read [student 2’s] paper when I was doing peer review, and I had other people read my paper. And then she had us read excerpts of our paper and in class, at the very end of class, so we got to hear piece of everyone’s paper, you know? So I--

KB: And you recognized your suggestions in their paper s?

Student 1: Yeah. Absolutely. You could, yeah. Because it’s a, it’s a process, so you, you…

INSTRUCTOR: You guys make me feel so awesome. I didn’t train--coach. There was no coaching.

(laughs)

Student 3: No bribery either!

INSTRUCTOR: Pizza.

Student 3: Oh. Pizza! Sorry. I, I was peer review partners with one of my best friends, Jessica, so I did read her paper more than just when we reviewed in class. So, I mean, that’s how I knew that she took my suggestions. But, I mean, I don’t--if it was another person that maybe I wasn’t so close to, then maybe I wouldn’t have known if they truthfully took my feedback or not.

KB: Did you notice any revisions, [student 4]?
Student 4: Yeah, I think, um, going back to the previous topic that, um, the reviewer has to be able to support their on what that, that should be changed. And then, um, why I think people find peer review negative is because they don’t remember that you can defend something you put down on your paper. And, um, you know, you can see when they take your suggestions; people take my suggestions a lot. And, um, I just, I have to remember to tell them that it’s not forced upon them. It’s just up to you if you want to make the change.

KB: Can I ask--did any of you notice if someone didn’t take your brilliant suggestions? And did it bother you that they didn’t do it?

Student 1: I, I mean I notice on a, on a… I did a lot of peer review. And I noticed on some that, um, they didn’t take my advice, but I didn’t take it as a slam to me personally. I mean, writing is a personal choice. It’s a very personal process, and so I can offer you suggestions and feedback, and if you take ‘em that’s great. And if it makes ‘em--if it makes you feel better about your paper or whatever, that’s awesome. But in the same vein, if you don’t take ‘em, then I’m okay with that because you didn’t see that as being a necessary step for you, so… I don’t, I don’t…

KB: So didn’t--you didn’t feel defeated or…

Student 1: No.

INSTRUCTOR: I have a question. Um, [student 3] you mentioned that you felt, um, some of the negativity about peer review was tied to the fact that you felt like some students were doing it because they had to it. The teacher told them to do it, or it was tied to a grade, or some kind, you know, tangible, um, reward for doing it. Um, do you see that as having impacted your experience in comp II? Um, and what would you suggest as an alternate to that? Like being offered points for doing it.

Student 3: I--I don’t…

INSTRUCTOR: Would you do it without the points?

Student 3: Um, I would. I don’t know about other people. But I don’t think that maybe necessarily giving points for participating is a bad thing. I think that, um, maybe now that I’m in college and it’s not high school, people are a bit more mature, more willing to help.

[Instructor e 4]

Student 3: So I think that the points isn’t necessarily what made them not, mmmm, accurately, you know, review my paper. I think it was just age and circumstance and… yeah. I mean--I don’t--I mean--I guess people would feel more inclined to do it if there were points. If there weren’t points, I don’t know if people would be willing. I don’t know. I mean, I would! But I don’t know about anyone else.

INSTRUCTOR: What about you, [student 2]?
Student 2: Well I was just goin’ to say we’ve been growing up most of our lives on corrections.

Student 3: Yeah.

Student 2: Like back in high school, if you corrected it this certain way that this person asked you too, then you get more points. You have a better chance of getting an A if you do the corrections that they tell you to.

Student 3: Yeah.

Student 2: That’s about all I was going to say.

Student 3: Yeah, and I think in school we’ve always been taught points, points, points. You always want as many points as you can get.

INSTRUCTOR: So I should just forge ahead with the brain washing?

(Student 3 and Student 2 laugh)

Student 3: I don’t know. I just--I would, I would be willing to help if it wasn’t … enforced.

INSTRUCTOR: Right. I understand.

Student 1: Well, and I think so because it causes you to go outside your comfort zone.

Student 3: That’s true.

Student 1: And if there’s not a reward for going outside your comfort zone, other than getting feedback on your paper, then I don’t know how many people would be willing to take that step outside their comfort zone.

KB: But on, but on the heels of that we asked you earlier if you were more inclined to do peer review earlier when you go to another class. Has that changed now that you guys have been sitting here thinking about that?

Student 3: Well--

Student 1: No. I think, I think I’m comfortable with it now.

Student 3: Yeah, I have more confidence to do so.
KB: You see the value in it?

(All agree)

Student 3: Yeah. I'm not as scared now.

KB: I have, I have one question that's not on the radar.

INSTRUCTOR: Yeah.

KB: Um, in other classes that you were in for comp I, did your teacher ha--have you do a handout to do peer review?

(All agree)

KB: And how do you feel about those handouts versus the way that Amy and I?

Student 1: Handouts teach nothing for me because I'm a hands on learner.

KB: Why didn’t you like it?

Student 1: Becuase I'm a hands on learner. You can give me a piece of paper, and it's going to mean nothing to me.

KB: And why did you, [student 4], like it?

Student 4: It made me organize my thoughts down just with the, uh, the target on the paper s.

KB: As a writer it helped you organize your thoughts?

Student 4: Yeah. And like, um, as reading peer review helps your experience in writing. The, the form and sheet it just helps you target each section of writing as you go down the essay.

Student 3: That’s true. I think I didn’t like that we were required to fill out every single… Like it was a paper and it had like ten questions, and you were required to edit their paper and write the worksheet and turn it in. I didn’t like that, I guess. Um, simply because I thought it took more time away from, um…

Student 1: The actual peer review.

Student 3: Correct. But I did like the suggestions that the paper gave and the format, maybe, because for some people that maybe don’t, um, have as much experience with peer review, it gives you kind of like a, um, roadmap of where you should start and maybe what you should look at. But…
KB: So if you want to learn how to do peer review, do you want the handout or do you want the tutors to come in and, and model it?

Student 3: Tutors.

Student 2: Tutors.

Student 1: Tutors.

INSTRUCTOR: [Student 4]?

Student 4: I’m fine with actually both because the sheet’s just helpful for, um, classmate-to-classmate peer review, and the tutors it was just helpful for themselves to sit and provide an example for everyone to see.

Student 1: Yeah, but not to have to fill out that form. That form is--I mean, I remember something in comp I about how you gotta do peer review and fill out that big form. And that’s just a waste of time ‘cause then you feel like you’re hurrying through the paper so you can fill out the form.

Student 3: Yeah.

Student 1: And it’s like, “Really?” What’s the point in that?

Student 3: I mean, I liked some of the questions. It did help me, like, (inaudible), but I just hated that I had to fill it out because we just didn’t have time. I was more concerned with getting my worksheet done than helping my partner because I had to get my points. (laughs)

Student 1: So the handout as a guideline maybe? To get--to give you like good direction? But to make you fill out a form is just …

Student 3: Yuck.

Student 1: What she said.

INSTRUCTOR: Do you have other questions?

KB: I don’t have any other questions. Do you have any other questions?

INSTRUCTOR: No. You guys are just so forthcoming. Like you asked a lot of questions, or answered them before we had a chance to. Um, anything else you want to say about it?

Student 3: Thank you

Student 2: Yeah. Thank you.
INSTRUCTOR: You’re awesome

KB: Thank you so much for coming. I really do appreciate it. It means a lot. I know it’s the end of the semester and you want to sleep or go swimming. Thank you so much for coming.