How Interacting With Teacher Feedback Impacts Students’ Writing

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HOW INTERACTING WITH TEACHER FEEDBACK IMPACTS STUDENTS’ WRITING

by

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A capstone submitted in partial fulfillment of the requirements for the degree of Master of Arts in Education.

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CHAPTER ONE

Introduction

Overview

The following research question is investigated in this paper: *How does purposeful interaction with teacher feedback impact the writing outcomes of high school students?* This chapter illustrates the effect that both personal and professional experiences with feedback related to writing have had on me as a student and an educator. These events together led me to develop a fascination with and belief in the incredible importance in how feedback is delivered by a teacher and used by the writer who receives it.

My Journey with Feedback

**Receiving feedback as a student.** In reflecting on my educational journey, the first significant event that opened my eyes to the importance of feedback was not one in which I gave it; rather, I was on the receiving end of it. Having been a straight A student all through high school, and one for whom writing had often come easily, I turned in my first paper for senior English with an assurance that it would be viewed as exemplary. When that paper was returned to me covered in red ink, filling the margins with my words underlined and crossed out, editing marks and abbreviations, question marks and suggestions for improvement, I was completely deflated. Do I remember the topic of the paper or the score I received on it to this day? No. But I certainly remember the feeling elicited by my teacher’s extensive comments.

On one hand, I was inherently motivated to write a “better” paper next time because that is the student I was: a type A perfectionist. However, I do not recall using my teacher’s
feedback to revise the essay, nor do I believe I looked back at it during later assignments to ensure I did not make the same mistakes on subsequent papers. Instead, the copious amount of feedback, with which I do not recall receiving any opportunity or direction to interpret or apply to the paper I had written, left me with a general feeling of defeat. It is very likely that I learned something from my well-intentioned teacher’s comments; however, having received no overt coaching on how to interpret the feedback, construct meaning from it, and apply it to my writing, I also question whether it could have been a more meaningful learning experience. My teacher spent a great deal of time (and probably felt quite frustrated) grading my and my classmates’ papers, and we spent all of three minutes looking at her many annotations before putting the marked up papers in folders or the trash, never to be viewed again. How can this process of providing feedback possibly result in improved student writing? So why do I believe this is still happening in many classrooms in my school and across America?

**Giving feedback as a teacher.** Despite having this experience as a high school student, I did not take the lessons I had learned into account in my first years as a teacher. Instead, I looked around at my colleagues and believed that the mark of a good English teacher was how many hours one spent grading papers. Casual Monday morning conversations in our department revolved around an entire weekend day someone spent at a coffee shop slaving over papers. I observed with my novice eye teachers who filled their students’ pages with the same red marks that my senior English teacher had. And so I followed suit. At the time I began my career in the English department at one of the largest high schools in the state of Minnesota, I was the youngest teacher in my department by
nearly a decade. Many of my colleagues had spent their entire careers in the building and were on the verge of retirement, and so accepted department practices reflected their mindset. I came to believe that I was expected to mark every single grammatical error on a student’s paper along with make comments about sentence fluency, content, organization, word choice, and MLA format.

At the time, I am sure that I believed that the method by which I delivered feedback and the content of that feedback was in my students’ best interest. However, I often also felt frustrated that my students did not spend nearly as much time reading the feedback as I did giving it, and they were not necessarily learning much from it either. Over time I began to see that for some students, this feedback was actually crippling. For some who were not like the type of student I was in high school, the content of my comments and the means by which I delivered my feedback may have led them to give up on themselves as writers, believing they had far too much to improve to even make the effort worthwhile. I look back on this early period in my career with many regrets.

Eventually, as I became tenured and gained more experience in the classroom, I slowly began to make small changes. I stopped marking grammatical errors after the first page of a student’s paper. I chose certain aspects of a paper to comment on, such as structure or word choice, rather than giving feedback on everything. I placed much more emphasis on revising rough drafts rather than only commenting on a final draft as I realized that comments on a final draft are meaningless if there is no immediate opportunity for students to implement what they have learned. I came to believe, based on
the experiences that I had with my students, that less is usually more when it comes to feedback on writing.

**Epiphany about feedback.** After spending seven years teaching a variety of courses to freshmen through seniors, I took a two-year hiatus from teaching. One of those years was spent out of the field altogether, but the second I served as an Instructional Coach in another school district. During this time, I observed teaching practices in all subject areas from math to FACS to physics at all grade levels. While I saw both amazing learning opportunities as well as antiquated methods still being used, I became absolutely convinced that providing effective feedback is the most significant high-impact practice a teacher can employ, no matter the subject or age of students.

Educational researcher John Hattie and his colleagues would agree. In Hattie’s meta-analysis of research, which constituted the basis of the *Visible Learning* series of books, feedback has an effect size of 0.75, ranking as one of the top ten practices on achievement and learning that can impact a student either positively or negatively. However, Fisher, Frey, and Hattie (2016) specified that there is a difference between giving and receiving feedback: “it’s only when the feedback is received that it works” (p. 32). Hattie’s work explained the importance not only of the feedback a teacher provides, but the feedback a student gives to a teacher as well, which makes his or her learning visible.

When I returned to the district in which I had begun my career after two years away, it was with a new perspective on feedback and a renewed commitment to implement the most effective practices in this area. I began teaching an intervention English 10 class for students with reading and writing skills that are below grade level, and suddenly the
stakes were even higher to ensure that my feedback does not confuse or deter my students, but rather supports them to become the best writers possible. I also realized that it was more important than ever that my feedback be “received” by my students, not just “given” by me. It is with this lens that I approach my research topic for this project.

As an English teacher, I recognize that both the content and the method by which I deliver feedback on my students’ writing matters. Providing corrective feedback versus positive reinforcement will significantly impact the outcome for students, as will delivering feedback on grammar versus content or giving specific suggestions for improvement versus simply pointing out what needs to be improved (Dinnen & Collopy, 2009; Gan & Hattie, 2014; Hattie & Timperley, 2007). Likewise, a great deal of research has been done on various methods of feedback. The effects of delivering feedback verbally, in writing, and using various electronic methods have all been studied (Gulley, 2012; Sipple, 2007).

As I contemplated all of these variables in determining a focus for this project, I had a major revelation: neither the content of the feedback nor the delivery vehicle for it matters if the students do not interact with the feedback in a meaningful way. This epiphany took me back to my own experience as a student receiving feedback on my writing. It really did not matter what my teacher’s comments were about or that she wrote them on my paper instead of verbally explaining them to me; what would have made a difference in that experience for me as a student would have been the opportunity to interact with her feedback in a more meaningful way. While this notion may seem obvious, my ten years in the field of education have shown me that it is not as it is still not an opportunity regularly provided to students.
As educators, we often make assumptions about what our students can do or inherently know to do. We may believe that because we have given them feedback on their work, they know how to deconstruct it, make meaning of it, and then apply it to improve their work. This is a grave mistake. Although my attitudes and practices toward feedback have changed greatly throughout my teaching career, I still do not believe I am making a concerted enough effort to ensure students know what to do next. This is where my beliefs, experiences, and passion converge for the purpose of this research project. In undertaking action research, I hoped to uncover what impact facilitated, purposeful interaction with feedback could have on high school students’ ability to improve their own writing.

**The Connection Between Writing and Feedback**

Research has shown that writing is an incredibly complex skill to develop (Graham & Harris, 2016; Grunke & Leonard-Zabel, 2015; Wilhelm, 2014), but it is also one of the most important skills for success in school and life (Grunke & Leonard-Zabel, 2015; Wilhelm, 2014). Teachers of writing often give feedback to their students about their writing development, which can have a powerful influence on student learning. Therefore, feedback should be an integral component of any writing process that will lead to improvement in student writing as well as increased motivation to write. The student also must make meaning of and choose how to use the feedback provided by the teacher.

**Conclusion**

My experiences, both as a writing teacher and a student writer, formed the foundation for this action research project. While I could have chosen many different components of feedback to study, I have come to believe that the single most important
facet of feedback really has nothing to do with the teacher who gives it, but rather lies at the center with the student who must interpret and apply it. I am interested in developing processes by which students are able to take the feedback given on a rough draft, interpret what it means, make decisions about how to best apply it to improve their writing, and then implement these learnings in a revised draft. This method will allow not only for feedback from teacher to student, but feedback from student to teacher in which the student will make his or her learning visible. Thus, the research question investigated in this paper is *How does purposeful interaction with teacher feedback impact the writing outcomes of high school students?* In the following chapter, I outline the research I have found related to feedback, writing instruction, and the importance of providing students opportunities to interact with feedback in the writing process.
CHAPTER TWO
Review of the Literature

Overview

As both a writer and a teacher of writing, I have seen first hand and strongly believe that feedback plays a critical role in writing development. Feedback can be delivered in many different ways, such as through written comments, audio recorded comments, writing conferences, peer review sessions, and more. Additionally, the content of feedback can vary greatly from abbreviations such as “sp.” to indicate a spelling error or “Great!” to extensive, specific comments about particular sections of a writer’s work or even thought-provoking questions to engage the writer in thinking about his or her work differently. However, I have come to believe that it is neither the mode of delivery nor the content of the feedback that most matters; rather, it is the writer’s interaction with the feedback that truly impacts writing development. This belief is the impetus for my research question: How does purposeful interaction with teacher feedback impact the writing outcomes of high school students?

The remainder of this chapter is devoted to presenting relevant research on the three topics of writing development, feedback, and motivation as it relates to writing. The first section gives evidence supporting the importance of writing instruction, describes how writing skills develop, and explains evidence-based strategies to implement during the writing process. The second section explains the impact of feedback on learning, elucidates research findings about both the content and delivery of feedback, and discusses
purposeful interaction with feedback. The final section weaves together the previous two and makes connections to a writer’s motivation.

**Writing Development**

**Importance of writing instruction.** The ability to write is one of the most important skills for a person to acquire for its application to many aspects of both education and life. Often, simply knowing something is not enough in school; a student must demonstrate his or her knowledge by putting it into writing (Graham & Harris, 2016; Grunke & Leonard-Zabel, 2015). Researchers seem to agree that writing is synonymous with thinking (Huskin, 2016; Cowles, 2015). Grunke and Leonard-Zabel (2015) claimed that "without adequate skills in thinking on paper, students are bound to perform poorly in a whole array of subject matters" (p. 138). However, writing is also one of the most complex skills to learn (Bromley, 2011; Graham & Harris, 2016; Grunke & Leonard-Zabel, 2015; Wilhelm, 2014). Feifer and Defina (2002) asserted: “Writing is a very complex neurodevelopmental process. It requires brain-based components such as intact attention and concentration, spatial and sequential production, memory, higher-order cognition, language involving vocabulary and spelling, as well as executive functioning” (as cited in Grunke & Leonard-Zabel, 2015, p. 138). Because of this, it is “extremely intricate to validly assess the product of one’s writing endeavors” (Grunke & Leonard-Zabel, 2015, p. 138). Likewise, it is also a skill that is complex to both research, due to its largely subjective nature, and teach because of all the components involved (Grunke & Leonard-Zabel, 2015).

The National Assessment of Educational Progress (NAEP) has commissioned studies that repeatedly found students to be deficient in necessary writing proficiency. The 2007
findings cited 76% of twelfth grade students and 67% of eighth grade students as writing below grade level (Graham & Sandmel, 2001). The results of the same organization’s study in 2011 “suggest that written language skills remain the single most challenging academic task to both teach and remediate successfully” (Grunke & Leonard-Zabel, 2015, p. 139). A majority of students continued to write below grade level in the 2011 findings, and the study determined that over a third of college-bound secondary students did not meet the criteria to be considered college ready in terms of composition ability (Grunke & Leonard-Zabel, 2015).

The ability of people to express themselves clearly in writing is “an extremely powerful predictor of academic and vocational success” (Grunke & Leonard-Zabel, 2015, p. 144) as well as an important component of being able to contribute to and function within a society (Grunke & Leonard-Zabel, 2015; Wilhelm, 2014). Due to the staggering importance of this competency, the fact that research has consistently shown it to be an area with which students struggle, and because it is such a complex skill to learn, it is important to next examine how writing skills develop as well as evidence-based strategies that have proven to be effective.

**Development of writing skills.** The chasm between a beginning writer and a proficient writer is great (Graham & Harris, 2016). According to Midgette, Haria, and MacArthur (2008), people acquire proficiency in composition gradually over time with practice (as cited in Grunke & Leonard-Zabel, 2015). A beginning writer typically strings together ideas that are topically related but not presented as a coherent text (Graham & Harris, 2016). For example, a child may first write down the idea, “I like to eat oranges,”
followed by the sentence, “Oranges are orange.” This may spur the writer to next compose the lines, “I like orange better than blue. The sky is blue.” Scardamalia and Bereiter (1986) explained this early stage of writing as the process of converting “the task of writing into telling what they know about a topic” (as cited in Graham & Harris, 2016, p. 359-360; Grunke & Leonard-Zabel, 2015). Unable to form a cohesive text that presents a fully developed idea, the writing is a string of ideas that build upon each preceding one.

Unlike with many other “academic competencies”, the development of advanced writing skills does not seem to follow a fixed set of stages (Grunke & Leonard-Zabel, 2015); Berninger and Winn (2006) explained that the development of writing “encompasses some small as well as some very major steps, a lot of plateaus, and even a number of temporary setbacks” (as cited in Grunke & Leonard-Zabel, 2015, p. 139). Although listening, speaking, reading, and writing are linguistic systems that develop alongside one another and are often intertwined, “there does not seem to be an end to perfecting writing abilities” (Grunke & Leonard-Zabel, 2015, p. 139) as there may be with the other areas.

Grunke and Leonard-Zabel’s (2015) compilation of the research on struggling writers explained many qualities that these students possess: difficulty with the grammatical and mechanical aspects of writing, such as spelling, punctuation, and capitalization are at the forefront. Fulk and Stoemont-Spurgin (1995) explained that these foundational skills must first be mastered: Students “are constantly so engaged in trying to meet the demands of lower-level text production tasks that they cannot think about the content of what they want to communicate and are unable to consider their potential
audience” (as cited in Grunke & Leonard-Zabel, 2015, p. 140). As the writing task becomes more difficult, these problems become ever more apparent.

**Evidence-based strategies.** Although there are many methods by which to teach writing, the process writing approach is widely accepted (Bromley, 2011) and “probably best situated to be implemented broadly in any effort to reform writing practices in the United States,” according to Graham and Sandmel’s meta-analysis of 29 studies of students in grades 1-12 (2011). Their meta-analysis found that the process approach to writing instruction “improved the overall quality of writing produced by students in general education classes” (p. 403); however, it did not have the same effect for at-risk students, nor was it found to enhance motivation amongst all students as the study had hypothesized (Graham & Sandmel, 2011). Graham and Harris (2016) cited the explicit instruction of “strategies for planning, drafting, revising, and editing text” as leading to a 35 percentile-point jump in writing quality (p. 363). Limpo and Alves (2013) found that the Self-Regulated Strategy Development (SRSD) model, which is comprised of the same fundamental features as the process writing approach, had an effect size that was twice as much as other instructional models (as cited in Grunke & Leonard-Zabel, 2015).

This process writing approach may be called by other names, such as Writer’s Workshop or SRSD, but no matter what it is called, there are common features. Most importantly, students engage in a writing process that includes a planning stage, implementation of the plan, and a time for review (Graham & Sandmel, 2011; Grunke & Leonard-Zabel, 2015). Within each of these three stages, there are numerous strategies that can be employed by teachers to maximize students’ potential as developing writers. These
strategies are described below in greater detail and organized by each stage of the composition process.

*Planning for writing.* In the first stage of the process writing approach, students generate and organize their ideas prior to composing anything. Research has shown that explicitly teaching planning strategies (Graham & Sandmel, 2011) such as the use of tools like graphic organizers has a positive impact on writing (Bromley, 2011; Graham & Harris, 2016; Grunke & Leonard-Zabel, 2015). Regan and Mastropieri (2009) advocated for simplifying “complex processes into small comprehensible steps” (as cited in Grunke & Leonard-Zabel, 2015, p. 141) in order to make the task of composition more manageable. Students should also set clear, specific goals throughout the writing process (Bromley, 2011; Graham & Harris, 2016).

*Implementing writing plan.* Once writers have completed the preliminary task of planning, they then execute the plan by composing or drafting a text. As with the explicit instruction of planning strategies, researchers also point to the effectiveness of explicit instruction of some foundational skills, such as paragraph and sentence construction (Graham & Sandmel, 2011; Graham & Harris, 2016), including specifically the skill of sentence combining (Grunke & Leonard-Zabel, 2015). Grunke and Leonard-Zabel (2015) expressed the importance of this: “The ability to construct sentences is undoubtedly one of the most vital competencies as a person tries to express his or her thoughts in writing” (p. 143).

Another way in which teachers can impact writing performance is to facilitate writing and scaffold instruction during the writing process. Teachers must provide
feedback throughout the process on how students are doing (Bromley, 2011; Graham & Harris, 2016). Individualized instruction can be “provided through minilessons, writing conferences, and teachable moments” based on personal needs (Graham & Sandmel, 2011, p. 397).

Finally, motivation is an extremely important element during this stage of the writing process. Students must feel ownership of their writing and engage in self-reflection (Bromley, 2011; Graham & Sandmel, 2011). Creating a supportive, pleasant, and nonthreatening environment in which for students to write is key (Bromley, 2011; Graham & Sandmel, 2011; Graham & Harris, 2016). Student motivation to write is improved as they “are systematically led from one partial success to the next, while constantly getting reinforced by the teacher for their efforts” (Grunke & Leonard-Zabel, 2015, p. 142).

Researchers also point to collaboration with peers during the writing process as an effective way to increase motivation (Graham & Sandmel, 2011; Graham & Harris, 2016). Motivation will continue as peer involvement in revision can “stimulate a slightly higher investment” in this part of the process (Callison, 2014, p. 19).

**Reviewing writing.** The final stage of the writing process approach is review or revision of the text that was composed in the drafting stage. Callison (2014) explained that extensive studies from the 1970s and 80s showed that students in both high school and college do not know how to effectively revise their writing. Additionally, a widespread negative attitude toward revision, in which it is viewed as “punishment”, impedes the effectiveness of this part of the process (Callison, 2014). As with the previous two stages, the explicit teaching of revision strategies is a necessary component of writing instruction
in order for students to improve (Graham & Sandmel, 2011). According to Callison (2014) revision currently takes two forms: encountering new information and assessing whether to incorporate it into the existing text and, secondly, proofreading. However, Callison (2014) encouraged opportunities for “deep revision”, although it may be met with resistance from both student and teacher, who may not want to devote the time and energy to this significant investment in altering the text.

**Additional evidence-based strategies.** In addition to the strategies described in the previous three sections that relate to specific parts of the process writing approach, there are other best practices for improving students’ writing abilities. Students should write for real purposes and audiences (Bromley, 2011), both short and extended writing projects (Graham & Sandmel, 2011; Graham & Harris, 2016), and use twenty-first century tools such as word processing (Bromley, 2011; Graham & Harris, 2016). The notion of writing to learn is emphasized because it allows students to interact with an idea and facilitate a deeper understanding of the material (Bromley, 2011; Graham & Harris, 2016). Developing writers should also write often: “When students write more frequently, there is a 12 percentile-point jump in writing quality” (Graham & Harris, 2016, p. 360). This frequent writing also has the added benefit of improving reading comprehension by “a 14 percentile-point jump” (Graham & Harris, 2016, p. 360). Direct instruction of critical skills such as typing, spelling, and punctuation is necessary so that students become proficient in these areas because it decreases the amount of “cognitive resources” that are consumed by these skills, thereby freeing up brain space for the more complex mechanisms of writing (Graham & Harris, 2016; Grunke & Leonard-Zabel, 2015). Finally, students should be
provided with models of good writing to both study and emulate (Bromley, 2011; Graham & Sandmel, 2011).

Because writing is a paramount skill necessary for success in both education and life, it is of the utmost importance for educators to understand how writing skills develop and implement evidence-based strategies for teaching writing. Much of the research on writing points to the use of a process approach that includes the three stages of planning, writing, and revising. Within each of these stages, numerous strategies can be implemented to successfully help students develop as writers. Feedback, discussed in the next section, plays a role in writing development, and as students progress, hopefully their motivation to write and their self-efficacy as writers will improve as well.

**Feedback**

**Definition of feedback and its impact on learning.** Feedback is defined as information provided through various means about components of one's understanding or performance (Hattie & Timperley, 2007). This information can be delivered by a teacher or peer, but it can also come from the student him/herself, a text, or through an experience. Regardless of the means of delivery, the feedback illuminates discrepancies between the student’s “current understandings/performance and a desired goal” (Hattie & Timperley, 2007, p. 87). Feedback, therefore, is an important part of the instructional cycle as it relates to formative assessment; a teacher responds to information collected with feedback that illuminates how the student’s performance compares with the standard (Dinnen & Collopy, 2009; Erkens, Schimmer & Vagle, 2017; Hattie & Timperley, 2007; Marzano, Pickering &
Pollock, 2001). However, feedback is only part of the equation, and without effective instruction, it can be meaningless (Erkens, Schimmer & Vagle, 2017).

Shepard (2005) believed that the use of effective feedback also scaffolds students’ learning to move them into the Zone of Proximal Development (ZPD), which is Vygotsky’s theory about the difference between what students can do with or without help (as cited in Dinnen & Collopy, 2009). Feedback is the support that aids students to do what they otherwise could not yet do on their own. Because students “may have different levels of actual and potential development”, they may need different feedback to move into the ZPD (Dinnen & Collopy, 2009, Theoretical Framework section, para. 3).

A great deal of research has been conducted on feedback and found that it has a powerful impact on student learning. Fisher, Frey, and Hattie’s Visible Learning for Literacy (2016) uses Hattie’s database of research, which includes “1,200 meta-analysis, with over 70,000 studies and 300 million students” (p. 4) to determine the best practices for literacy instruction. As it relates to writing development, feedback is one of the primary ways that teachers communicate with their students about their writing. The research on feedback specifically focused on writing development, however, has mostly been done on students for whom English is a second language, not primary English speakers. A need exists for more research on writing feedback for native English speakers (McGrath, Taylor, & Pychyl, 2011).

Overall, the powerful effect of feedback can be either positive or negative depending on many factors including: the type of feedback, the way the feedback is delivered, and how
the student interprets and acts upon the feedback. The research related to each of these three areas is outlined in detail in the following sections.

**Content of feedback.** The first significant factor to examine is the substance of the feedback, or the content of the message. Based on Hattie’s 1999 report including the results of 180,000 studies, Hattie and Timperley (2007) defined four levels of feedback. The first level of feedback is about the task or product, which points out whether or not the work is correct. This is the most common type of feedback provided to students and is often referred to as corrective. The next type of feedback relates to the thought processes students used to complete the task or product and is more effective for “enhancing deeper learning” than feedback about task (p. 93). Third is self-regulatory feedback, which encourages students to continue engaging in a task based on the work previously completed. Finally, feedback that is personal in nature does not relate to the task but rather is about the self (i.e. “You tried hard.”). Beyond these four levels described by Hattie and Timperley (2007), there are common themes found amongst researchers, though the terminology used to describe the feedback differs.

Hattie and Timperley’s (2007) review of the research overwhelmingly shows that in order for feedback to be effective, the content must be specific enough to bridge the divide between what the student currently knows and what learning outcome he or she is striving for (Marzano, Pickering & Pollock, 2001). Students also must know what steps to take in order to improve. Again, in this regard, effective feedback serves as scaffolding to support students in doing what they could not otherwise do on their own (Dinnen & Collopy, 2009). Feedback, therefore, that is unrelated to a specific, appropriate goal does not reduce the
knowledge gap (Dinnen & Collopy, 2009; Hattie & Timperley, 2007; Marzano, Pickering & Pollock, 2001). A study conducted by McGrath, Taylor, and Pychyl (2011) defines feedback as developed if it is “clear, specific, and explanatory in nature” (p. 1). They examined its effectiveness on students’ writing performance as well as perspective in comparison to undeveloped feedback. Willingham (1990) suggested the use of a conversational tone with specific explanations about specific parts of a writer’s text listed in order of importance (as cited in McGrath, Taylor, & Pychyl, 2011). Developed feedback provides thoroughly formulated comments throughout a paper and notes limited grammatical errors accompanied by an explanation of how to fix each one. It uses questions to initiate a “dialogue” with the writer (McGrath, Taylor, & Pychyl, 2011, p. 5). This study found that student perceptions of developed feedback were more positive in terms of helpfulness and fairness.

Conversely, unspecific feedback can have a negative effect: it can result in “uncertainty, decreased motivation, and even diminished learning” (Goodwin & Miller, 2012, Make Guidance Specific section, para. 2). McGrath, Taylor, and Pychyl (2011) defined undeveloped feedback as vague, often using only single words or abbreviations. This type of feedback does not give an opening comment on a writer’s work, highlights or fixes grammatical errors without any explanation, and gives a nonspecific closing comment such as “Good job”. Students perceive vague feedback that is “focused on negative aspects of their writing as unhelpful” (McGrath, Taylor, & Pychyl, 2011, p. 1). Kulhavy (1977) found that feedback given related to a concept with which the student is totally unaware can
actually be damaging; in a case such as this, additional instruction is more appropriate than feedback (as cited in Hattie & Timperley, 2007).

In addition to assessing feedback based on its level of specificity, researchers have also examined the difference between evaluative and improvement oriented, or descriptive, feedback. The former simply states whether something is right or wrong, while the latter explains not only why something is incorrect, but also provides an explanation of how to fix it. Descriptive or corrective feedback raises achievement and is more helpful to student writers (Dinnen & Collopy, 2009; Erkens, Schimmer & Vagle, 2017; Marzano, Pickering & Pollock, 2001). Clear, specific guidance on how to improve is best, and Wiliam (2011) found that adding numeric scores to written feedback may actually negate the benefit of effective comments because students see no need to read them and only look at the numbers on a rubric, for example (as cited in Goodwin & Miller, 2012; Erkens, Schimmer & Vagle, 2017). Dinnen and Collopy’s (2009) study, which involved interviews with fifteen teachers about the writing feedback they give students, found that both strong and weak writers received little improvement oriented feedback as well as minimal feedback on more complex writing categories such as sentence fluency and voice. However, feedback about ideas rather than conventions in writing was more effective at improving the quality of writing and also appreciated more by students (Dinnen & Collopy, 2009). Developmental feedback, which could also be considered improvement oriented or self-regulatory (Hattie & Timperley, 2007) gives students strategies and information to improve, which may also transfer to other tasks (McGrath, Taylor, & Pychyl, 2011). The
goal in providing this type of feedback is to encourage students to improve their own writing, not do it for them (McGrath, Taylor, & Pychyl, 2011).

One aspect of the content of feedback that has contradictory research is the use of praise. Multiple sources asserted that praise is not typically effective, especially when it is personal in nature, and may actually have adverse consequences if it detracts from the learning task (Gan & Hattie, 2014; Hattie & Timperley, 2007). Praise that is personal or about the self is ineffective because it is not focused on performance and therefore does not help scaffold learning for students (Dinnen & Collopy, 2009). According to Hattie and Timperley (2007), self praise has

an impact on learning only if it leads to changes in students’ effort, engagement, or feelings of efficacy in relation to the learning or to the strategies they use when attempting to understand tasks. The effects at the self level are too diluted, too often uninformative about performing the task, and too influenced by students’ self-concept to be effective. (p. 96)

On the other hand, McGrath, Taylor, and Pychyl (2011) found that positive comments such as “good” are encouraging to students; they can have a positive impact on building a writer’s confidence, motivate them to revise, and reduce their anxiety about writing. Lizzio and Wilson’s (2008) study found that students value encouraging feedback that “addressed the emotional aspects of writing and enhanced motivation by acknowledging what the students did well or the effort invested in the writing” (as cited in McGrath, Taylor, & Pychyl, 2011, p. 2). Although multiple studies show that students like praise, it has not been empirically proven to improve performance.
**Delivery of feedback.** In addition to the content of the feedback, the way in which it is delivered as well as circumstances surrounding its transmission have also been studied (Fisher, Frey, & Hattie, 2016; Gan & Hattie, 2014; Goodwin & Miller, 2012; Gulley, 2012; McGrath, Taylor, & Pychyl, 2011; Sipple, 2007). One area of interest has been to examine the effect of timing and whether immediate or delayed feedback is more effective. Research has also been conducted on various technological tools that can be used to give feedback, as well as a great deal on the “traditional” methods of delivery, such as notes written in the margins of a paper and writing conferences (Gulley, 2012; McGrath, Taylor, & Pychyl, 2011; Sipple, 2007). The impact of the quantity of feedback has also been examined.

Many of the aspects of using the mode of written feedback have already been discussed in the previous section on content; the impact of delivering specific or vague feedback, corrective versus improvement oriented feedback, and praise are all components of written feedback that need to be understood. When using written feedback, one challenge is that the intention of the message may not be clear to students and could therefore be misinterpreted. Even if students may read and interpret handwritten comments correctly, they may “fail to internalize the commentary in ways that allow them to incorporate new techniques or writing suggestions into drafts of subsequent papers” (Sipple, 2007, Abstract section). Ideally, effective feedback should be transferrable to other learning tasks. Heller (1989) described that another concern about written feedback is that it may just encourage the student to write the paper the way the teacher wants rather than taking ownership of it (as cited in Gulley, 2012).
Providing feedback verbally rather than in writing is one area of interest represented in the research. Writing conferences held between teachers and students are a widely practiced instructional method, but virtually no evidence suggests that conferencing is more effective than using written feedback (Gulley, 2012). Gulley’s (2012) review of existing research cited that it is contradictory about verbal feedback: some researchers believe it should be the primary method, while others caution against it for reasons such as the teacher’s tendency to take over the paper of a struggling student or focus too much on grammar. According to Hiatt (1975), the teacher student conference may harm a struggling student, while for a stronger student, it may allow the teacher and learner to participate in more sophisticated conversations about their writing (as cited in Gulley, 2012). Gulley’s (2012) study found that students improved their writing from first to second draft regardless of the method of delivery: verbal, written, or both verbal and written used in conjunction.

Another way besides writing conferences to deliver feedback verbally is through using recorded audio commentary. Sommers (1989, 2002) believed that this type of feedback allows for more detailed individualized instruction and that it “heightens students’ awareness of the reader in ways that written comments do not” (as cited in Sipple, 2007, Related Literature section, para. 3). Likewise, Anson (1997; 1999) asserted that audio feedback allows for a “social dimension” that written commentary does not and shifts the teacher’s role from corrector or judge into coach (as cited in Sipple, 2007). Recorded audio commentary was perceived by students to be more user-friendly and personal, and it allowed the writer to have a better sense of what the instructor meant due
to the speaker’s intonation and emotion in the recording. Audio recordings allowed the
teacher’s personality to come through, which led to an “enhanced attitude” toward the
teacher by the student; they also created the perception that the teacher truly cared about
the student’s work because of the “time and energy” invested to create the audio
recordings (Sipple, 2007, Interview Results section, para. 12 and 13). Students in this study
indicated that they increased their effort in the class due to the perceived personal nature
of this type of feedback. The results of Sipple’s (2007) qualitative study found that 70% of
subjects preferred audio feedback to written feedback on initial drafts for six main reasons:
increased motivation and self-confidence, ability to internalize feedback, greater detail in
feedback, decreased misinterpretation of feedback, strengthened relationship with teacher,
and perception of innovation in delivery method. For the 21% who preferred written
comments, it was unanimously because the subjects believed it allowed them to locate
their mistakes more easily. Some students (9%) indicated a preference for receiving both
types of feedback on the same draft.

With regard to other elements related to the transmission of feedback, timing and
quantity have both been examined in the research. The optimal timing depends on the task;
for most purposes, more immediate feedback is preferable to significantly delayed
feedback (Fisher, Frey, & Hattie, 2016; Goodwin & Miller, 2012; Marzano, Pickering &
Pollock, 2001). However, when extending or applying knowledge, such as in writing an
essay, feedback that is too immediate may result in conditioning students to become too
dependent upon teachers for assistance rather than working through issues themselves
feedback beyond when it would make a difference to students” (p. 34). The topic of quantity has already been addressed briefly in the previous section on content; McGrath, Taylor, and Pychyl (2011) explained that developed feedback gives limited comments related to grammar and each one illustrates how to fix the mistake. Teachers should choose a specific area of focus to guide feedback; it is not possible to comment on everything, and overwhelming feedback is not beneficial to students (Fisher, Frey, & Hattie, 2016; McGrath, Taylor, & Pychyl, 2011).

**Purposeful interaction with feedback.** Some research also mentioned the importance of student interaction with feedback, though no studies overtly about this topic have yet been discovered. Researchers acknowledge that giving feedback may not on its own propel students to take further action (Fisher, Frey, & Hattie, 2016). This area is of particular interest as it is the crux of the research question for this project. McGrath, Taylor, and Pychyl (2011) asserted that further investigation needs to be conducted not only on the various types of feedback, but also on “classroom activities that explicitly require students to use the feedback” (p. 8). According to Hattie and Timperley (2007), “The ways and manner in which individuals interpret feedback information is the key to developing positive and valuable concepts of self-efficacy about learning, which in turn leads to further learning” (p. 101). Sommers (2002) believed that audio feedback allows students to engage in a meaningful dialogue with the commentator and with themselves as writers through the process of interpreting the verbal feedback (as cited in Sipple, 2007). Sipple (2007) suggested that the way to maximize the impact of using audio feedback is to have students engage with it in a meaningful way after listening by doing reflective writing: “This
postcommentary writing assignment could ask students to listen to, interpret, and then write comments on their own essays, thus helping them to deepen the internalization of feedback” (Implications for Practice and Future Research section, para. 2). Gulley (2012) asserted that the teacher’s expectation that students revise their papers, along with specific directions for what and how to revise, may ultimately be more important than the way in which the feedback is delivered. All of these findings point to the need for a teacher to model and facilitate a process by which student interact with the feedback they receive in a meaningful manner.

**Motivation and Self-Efficacy as a Writer**

As students move from beginning to proficient writers, motivation is an important element of the equation. Teachers must understand how to motivate students to write or help them find intrinsic motivation so that they grow in confidence and independence as writers. Many of the strategies discussed in the previous section on writing development have also been shown to improve engagement and motivation for writers: scaffolding during the writing process (Huskin, 2016; Wilhelm, 2014), incorporating frequent writing tasks of various lengths, breaking down a task into smaller parts, and using graphic organizers (Huskin, 2016). Additionally, providing opportunities for revision (Cowles, 2015; Huskin, 2016) and peer review have been shown to increase motivation for developing writers (Huskin, 2016). Likewise, students must have a personal stake in their learning (Cowles, 2015); when they do, increased engagement, motivation, and a positive outlook follows (Goodwin & Miller, 2012). Kluger and DeNisi (1996) found that when students have a clear learning target and believe that they will eventually be successful,
they are more apt to increase effort (as cited in Hattie & Timperley, 2007). Possessing a dynamic or growth mindset allows a student to persevere through difficult tasks (Dweck, 2006; Wilhelm, 2014).

Feedback, which was discussed in detail earlier in this chapter, plays a critical role in students’ motivation. As Shute (2008) noted, when students receive feedback formatively, they “develop a learning orientation, in which they view improving their own competence as the goal of learning” rather than the objective being to get a good grade (as cited in Goodwin & Miller, 2012, Link Feedback to Learning Objective section, para. 2). The qualitative results of the study conducted by Sipple (2007) made significant connections between the use of audio feedback and increased motivation. The subjects’ perceptions of the care and attention given by the instructor to provide extensive recorded feedback, both positive and negative in nature, affected their effort in the class. Sipple (2007) found that recorded audio comments “increased their confidence as writers specifically because of the perception that they provided more genuine and frequent praise. In turn, they said the praise made them work harder on their revisions” (Interview Results section, para. 1).

The 2008 National Survey of Student Engagement found a positive correlation between the amount of writing students do and their engagement as learners; the greater the writing, the more engaged the learner with peers, the teacher, and the learning itself (Huskin, 2016). Wilhelm (2014) asserted that when students see that success comes from effort, the greater the motivation they will have to continue practicing their skills: “Practice is the only way through the struggle and onto the journey toward proficiency and personal power” (p. 69).
Conclusion

Feedback, writing development, and motivation are three topics that significantly overlap and have many important connections between them. Feedback provides a student information about his or her progress toward a learning goal. Research has found feedback to be one of the highest impact influences on student learning. However, this impact can be either positive or negative depending on numerous factors. The ability to write is one of the most important skills to acquire for success in education and life, but it is also one of the most complex skills to develop. Feedback should be an integral component of any writing process and hopefully lends itself to not only improvement in student writing, but also increased motivation to write. My research question, *How does purposeful interaction with teacher feedback impact the writing outcomes of high school students?*, examines how providing feedback and the opportunity to interact with it in a meaningful way influences students’ writing development and motivation. The next chapter details the methods used to conduct research for this project.
CHAPTER THREE

Methods

Overview

Writing is an incredibly complex skill to develop, and research has consistently shown it to be an area with which students struggle (Graham & Harris, 2016; Graham & Sandmel, 2001; Grunke & Leonard-Zabel, 2015; Wilhelm, 2014). However, it is also of the utmost importance to be able to communicate in writing effectively in order to be successful in school and society (Grunke & Leonard-Zabel, 2015; Wilhelm, 2014). Teachers of writing often give feedback to their students about their development of this skill, which provides them with information about the difference between their current ability and the goal toward which they are striving. Feedback can have a powerful influence on student learning. Therefore, feedback should be an integral component of any writing process that will lead to improvement in student writing as well as increased motivation to write. Another consideration in this process is how the student makes meaning of and chooses to use the feedback provided by the teacher.

For my research study, I set out to discover if there is a marked improvement in student writing when students are required to interact with the teacher’s feedback in a meaningful, purposeful way after deliberate modeling of how to do so. This chapter explains the setting and participants in my study and the procedures I used to investigate my research question: How does purposeful interaction with teacher feedback impact the writing outcomes of high school students? First, I explain the rationale for my chosen
research paradigm and methodology. I then describe the setting and participants in my study. Finally, I outline the procedures and data collection tools used.

**Research Paradigm**

I chose to use a mixed methods research design with emphasis placed on the quantitative data. The reason that I chose to gather both types of data is that I saw value in not only collecting quantitative data on how writing performance changed from a rough draft to a final draft, but also qualitative data on student perceptions about their writing and how (or if) they interpreted and used the feedback they received. I did not believe that having just the data on changes in performance from one draft to the next would provide the full picture; I was interested in knowing my students’ perceptions about their writing for a more complete understanding of this strategy and its applications in my classroom.

For the quantitative part of my project, I used what Creswell (2013) defined as a pre-experimental design where “the researcher studies a single group and provides an intervention during the experiment” (p. 219) rather than assigning different groups different treatments at various times. It made sense to me to use the explanatory sequential mixed methods design where the quantitative data collection and analysis occurred first and then was followed by the qualitative data collection and analysis. I repeated this cycle of data collection twice and finally interpreted all the results. This mixed methods approach allowed me to ensure that I did not rely solely on one type of data to interpret the research.

I believe that the worldview that most closely aligns with my research question and paradigm is pragmatism. As Creswell (2013) stated, “for the mixed methods researcher, pragmatism opens the door to multiple methods, different worldviews, and different
assumptions, as well as different forms of data collection and analysis” (p. 40). This openness to different methods to answer a relevant and important question guided my design of the project.

Setting

The setting of my project is one of the largest suburban high schools in the Midwest. The racial makeup of the school in 2017 was 67% White, 11% Black/African American, 1% American Indian/Alaska Native, 11% Asian, 7% Hispanic/Latino, and 4% from two or more races. In 2016 the graduation rate was 87.7% (Minnesota Department of Education, 2017). The city in which the school is located has grown more diverse over the past decade and has also been named one of Money Magazine’s best places to live in America for the past ten years. The district has one high school whose enrollment for the 2017-18 school year was 2989 students.

Participants

The participants in my study were the students in my two class sections of an intervention English 10 course for students who are behind their grade-level peers in the development of age-appropriate literacy skills. The primary goal of the course is to improve students’ reading and writing skills so that they will be prepared for eleventh grade English. The class was co-taught by two English teachers and offered on a block schedule (86 minutes/day) for the entire school year.

The racial makeup of this group of 36 participating students was 33% White, 44% Black, 5% Hispanic/Latino, 14% Native American, and 3% Asian. Of the 31 students who completed the first survey, 13 of them (42%) reported speaking another language at home,
including Spanish and Somali. Out of the 36 students, 16 had an IEP or 504 plan. 27 of the participants were male and 9 were female.

I obtained permission from my building administrator to conduct research in May 2017 and submitted my proposal to the Institutional Review Board at Hamline University in August 2017.

**Procedures**

I began with the first round of quantitative data collection on September 14, 2017. Students completed a short personal writing assignment with the following parameters: “Write a well-developed paragraph of at least 8 sentences that addresses the following prompt”. The prompt was: “Describe a problem that is faced by teenagers today and what could be done to solve it”. This “first draft” was scored using a rubric that measured three areas of writing skills - content, organization, and writing quality (see Appendix A) - and students also received written electronic feedback using the website Turnitin.com. The comments given on Turnitin were standardized to be consistent from student to student. For this round of quantitative data collection, students were not given instructions other than to revise their “first draft” based upon the feedback they had received. They were also given the scored rubric to use as a tool to guide revision. I verbally answered questions that were initiated by students about their feedback but otherwise did not intervene in their interpretation of the feedback or their application of it to their revisions. After revision, students turned in their “final draft” which was scored using the same rubric. The scores from the “first draft” to “final draft” were compared and analyzed at this point.
The first round of qualitative data collection immediately followed the submission of “final drafts” on September 18, 2017. Students completed a survey (see Appendix B) in class anonymously using a Google form to share their perceptions about their writing and how (or if) they used the feedback to revise it between drafts. I also kept a reflective journal (see Appendix C) to note my observations and experiences with this data collection process. I made entries immediately after grading each set of the students’ papers following a standard journal format each time.

The second round of quantitative data collection began on October 2, 2017 with students completing another short personal writing assignment with the same parameters and level of difficulty as the first one; the wording of the prompt remained exactly the same with only the topic changing. The prompt this time was: “Describe something you would change about our school. Explain what is wrong with the current situation and how it could be improved.” This “first draft” was again scored using the same rubric as the first round of data (see Appendix A), and students once again received standardized comments electronically delivered via Turnit.in.com. The notable difference between this round of quantitative data collection and the first was that students were directed to interact with the feedback they had received in a purposeful manner.

In the process of developing this project, I reflected a great deal on my experiences both as a teacher and as a student myself. I also read much of the existing research on feedback, most of which focused on the content of the feedback or its mode of delivery. However, the common thread that I uncovered as I considered my own experiences and the findings in the literature was that what the teacher says about a student’s work and how he
or she says it, whether verbally, in writing, or through another method, does not really matter if the student does not take the time or have the opportunity to understand it and determine how to implement it. This belief led me to develop a method by which to attempt to teach my students how to make meaning of and then act upon the feedback they receive on their writing.

This time when I gave students their “first draft” back with a scored rubric and comments, I enacted a multi-step process for interacting with the feedback. Students were first directed to read over the rubric as well as the comments on Turnitin, and they were given adequate time in class to do so. I then modeled for them how to make meaning of the feedback by displaying an example paper in Turnitin on the SmartBoard and using the strategy of a think-aloud to teach them how to determine what each comment meant in relation to their writing. After modeling, students were instructed to look over their feedback again and then answer the five reflective questions on the feedback interaction form (see Appendix D). This form allowed them to articulate how they intended to use the feedback to improve their paper. After completing the form, students immediately revised their “first draft” while I used the form to address questions while they worked. After revision, students turned in their “final draft” and it was scored using the same rubric. The scores from the “first draft” to “final draft” were compared and analyzed, and the scores from quantitative data collection round one (in which students were not instructed on how to interact with the feedback) were also compared to the scores from quantitative data collection round two at this time.
For the second and final round of qualitative data collection, students again completed a survey anonymously on a Google form immediately after submitting the “final draft” to share their perceptions about their writing and how they used the feedback to revise it between drafts. The results of this survey were compared with the results of the survey the first time it was administered to determine if and how perceptions changed as a result of the process of using the feedback interaction form. I made more entries in my reflective journal (see Appendix C) to note my observations and experiences after grading each set of the students’ papers in this round of quantitative data collection as well as after observing the students interpreting and implementing the feedback they had received.

**Conclusion**

In Chapter 3 I discussed the mixed methods approach I took to investigate my research question: *How does purposeful interaction with teacher feedback impact the writing outcomes of high school students?* I described my research paradigm and methodology, the setting and participants in my study, and the procedures and data collection tools used. The primary objective of this research study was to compare the results of a writing process where students were given feedback but not explicitly made to interact with it and a writing process where purposeful interaction with the feedback was required. I hypothesized that purposeful, directed interaction with feedback would result in greater improvements from “first draft” to “final draft”. Student perceptions about the writing process were also compared in each approach. Chapter 4 will state the results of the project.
CHAPTER FOUR

Results

Overview

The goal of this study was to compare the results of a writing process in which students were given feedback but not explicitly taught how to interact with and implement it and a writing process where purposeful analysis of and interaction with the feedback was both modeled and required. It also examined student perceptions about the revision process and their ability to interpret and use feedback given by the teacher. This chapter will present the quantitative data collected during the process of students writing and revising two different papers, one in which they received feedback but little direction in how to interpret and apply it and one in which they implemented a modeled process of feedback interaction. The chapter also includes qualitative data gathered from students and teacher observations and reflections from each part of the study. Finally, this chapter will analyze the data presented to determine if the writing outcomes for students were impacted by the implementation of a deliberate process of feedback interaction.

Review of Methods

Chapter 3 explained the methods used to investigate the research question: How does purposeful interaction with teacher feedback impact the writing outcomes of high school students? A mixed methods approach was used to answer this question in order to collect not only numerical data on changes in student scores from one draft to another, but also student perceptions about their understanding of feedback and ability to implement it successfully.
The study was conducted at a large suburban Midwestern high school. The participants were the students in the researcher’s two class sections of an intervention English 10 course; these sophomores began the school year behind their grade-level peers in the development of age-appropriate literacy skills. Each class was co-taught by myself and another English teacher. Class periods were 86 minutes long on a block schedule with class held every day. The racial makeup of this group of 36 participating students was 33% White, 44% Black, 5% Hispanic/Latino, 14% Native American, and 3% Asian. Of the 31 students who completed the first survey, 13 of them (42%) reported speaking another language at home. Out of the 36 participants, 16 had an IEP or 504 plan; 27 students were male and 9 were female.

Data collection began on September 14, 2017 and concluded on October 4, 2017; it took place over the span of three weeks while students engaged in writing and revising two separate papers. For each of these writing assignments, the initial directions remained the same and the prompts were similar in terms of both topic and level of difficulty. The same rubric was used to score both papers, and the feedback given electronically via Turnitin was standardized and used for both assignments. The primary difference between the two paper assignments was that for the first, students received feedback on their first draft and were told to revise it with no other direction given; for the second assignment, an example paper and think-aloud method were used to model how to examine, interpret, and implement the feedback given on the first draft before students revised it.
**Quantitative Data Collection Results**

The quantitative data is comprised of student scores from each of the two writing assignments. These scores were determined using a rubric (Appendix A). The rubric measured three aspects of student writing: content, organization, and writing quality; each of these categories was worth 9 points for a total of 27 points. The scores from each category on the rubric were examined separately along with the total score on the paper.

**Data results without explicit feedback interaction.** For the first writing assignment, students were instructed to do the following: “Write a well-developed paragraph of at least 8 sentences that addresses the following prompt.” The prompt was: “Describe a problem that is faced by teenagers today and what could be done to solve it.” Students were given an overview of the rubric and told which aspects of their writing would be assessed. They wrote the paragraph during class time and had their questions answered as they arose. Upon completion, papers were submitted to the website Turnitin and given standardized electronic feedback that matched the criteria specified on the rubric. Below is a table illustrating the scores from the first draft, written on September 14: Table 1.

<table>
<thead>
<tr>
<th>First Draft Scores Without Explicit Feedback Interaction</th>
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</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Content Score</strong></td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Mode</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Standard Deviation</td>
</tr>
</tbody>
</table>
Two class days later, students received their scored rubrics and were told to log in to Turnitin to view their electronic feedback. They were instructed to revise their papers and re-submit them to Turnitin when done. Students were informed that they would receive a grade on the final, revised draft of the paper, not their initial draft. No further instruction was given on how to interpret the feedback or revise. If students raised their hands to ask questions about what was meant by a comment on Turnitin or what was “wrong” with their papers, they were answered by the teachers; only a handful of students asked questions. The scored rubrics were re-collected after students had uploaded the new drafts of their papers to Turnitin; they were again used to score the final drafts in a different color ink so that both the teachers and students could see the difference between scores on each draft. Below is a table illustrating the scores from the final draft, written on September 18:

Table 2.

<table>
<thead>
<tr>
<th>Final Draft Scores Without Explicit Feedback Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Score</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Mode</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Standard Deviation</td>
</tr>
</tbody>
</table>

Following are tables showing the direct comparison of data from first draft to final draft for each category on the rubric as well as the overall paper scores:
Table 3.

<table>
<thead>
<tr>
<th>Content Scores Without Explicit Feedback Interaction</th>
<th>First Draft Content Score</th>
<th>Final Draft Content Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Mode</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Mean</td>
<td>7.47</td>
<td>7.64</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.32</td>
<td>1.07</td>
</tr>
</tbody>
</table>

Table 4.

<table>
<thead>
<tr>
<th>Organization Scores Without Explicit Feedback Interaction</th>
<th>First Draft Organization Score</th>
<th>Final Draft Organization Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Mode</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Mean</td>
<td>6.64</td>
<td>7.08</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.36</td>
<td>1.36</td>
</tr>
</tbody>
</table>
Tables 3 through 6 illustrate that every individual category on the rubric, as well as the total score, showed improvement in the mean from first draft to final draft. However, these improvements were marginal, the greatest being the growth of 1.02 points of the mean of the total score from first draft to final draft. Of the 36 students whose total paper
scores were examined, 24 of them (67%) showed improvement from first draft to final draft, while 1 student’s score declined and 11 (31%) remained unchanged. For the 24 students who improved their scores through the revision process, 16 of them (44%) gained only 1 additional point; 7 (19%) improved by 2 points; 1 student, an outlier whose original score had been only 9 points total, improved by 9 points.

In examining the data from each of the three categories on the rubric, the one in which students improved the most was writing quality: 15 students (42%) improved, while 20 (56%) remained unchanged and 1 score dropped. Organization is the category that showed the next most improvement: 12 students (33%) improved and 24 (67%) remained unchanged. The category of content was the one that showed the least amount of improvement: 4 students (11%) improved their scores, 1 score dropped, and 31 (86%) did not change.

**Data results using explicit interaction with feedback.** The second round of quantitative data collection began on October 2, 2017, with students completing another short writing assignment with the same parameters and level of difficulty as the first one; the wording of the directions remained exactly the same with only the topic changing. The prompt this time was “Describe something you would change about our school. Explain what is wrong with the current situation and how it could be improved.” Students were reminded about the content of the rubric (Appendix A) and told which aspects of their writing would be assessed. They wrote the paragraph during class time and had their questions answered as they arose, just as with the first paper. Upon completion, papers were once again submitted to the website Turnitin and given standardized electronic
feedback that matched the criteria specified on the rubric. Below is a table illustrating the scores from the first draft, written on October 2:

Table 7.

<table>
<thead>
<tr>
<th>First Draft Scores With Explicit Feedback Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Score</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Mode</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Standard Deviation</td>
</tr>
</tbody>
</table>

Two class days later, students were told that they would once again be revising their papers. However, this time the class examined a model paper before doing so. An example paper that I had written was projected onto the SmartBoard. It had been uploaded to Turnitin and given feedback using the same standardized comments as the students’ own papers. We went through the paragraph as a class, comment by comment, discussing what each one meant and addressing questions and misconceptions. We also worked through how to implement changes for some of the most common or more cognitively difficult comments, such as run-ons, missing transitions, and lack of support. The instructional method used was a think-aloud where I posed questions and solicited responses from the students.

After thoroughly analyzing the example paper and its feedback, students were given back their own scored rubrics and instructed to login to Turnitin to view their feedback. At
this time they were also given the Feedback Interaction Form (Appendix D) and told to complete it as they looked over their own feedback before they began revising. As students interacted with the feedback, the teachers moved around the room and addressed the comments written on the Feedback Interaction Form along with questions posed by students verbally. Students once again revised their papers during class time and then uploaded them to Turnitin where they were scored using the same rubric as the first draft with a different color of ink. Below is a table illustrating the scores from the final draft, written on October 4:

Table 8.

<table>
<thead>
<tr>
<th>Final Draft Scores With Explicit Feedback Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Mode</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Standard Deviation</td>
</tr>
</tbody>
</table>

Following are tables showing the direct comparison of data from first draft to final draft for each category on the rubric as well as the overall paper scores:
Table 9.

<table>
<thead>
<tr>
<th></th>
<th>First Draft Content Score</th>
<th>Final Draft Content Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Mode</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Mean</td>
<td>7.48</td>
<td>7.94</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.26</td>
<td>0.97</td>
</tr>
</tbody>
</table>

Table 10.

<table>
<thead>
<tr>
<th></th>
<th>First Draft Organization Score</th>
<th>Final Draft Organization Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Mode</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Mean</td>
<td>6.55</td>
<td>7.58</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.20</td>
<td>1.17</td>
</tr>
</tbody>
</table>
Tables 7 through 12 illustrate that every individual category on the rubric, as well as the total score, showed improvement in the mean from first draft to final draft. The greatest growth was for the mean of the total score from first draft to final draft, which was 2.39 points. All 33 students (100%) whose total paper scores were examined in this round of data collection showed improvement from first draft to final draft. In this round’s
revision process, 8 students (24%) gained 1 additional point; 10 (30%) improved by 2 points; 11 (33%) improved by 3 points; 2 (6%) gained 4 points; and 2 (6%) earned 5 points more on the revision.

In examining the data from each of the three categories on the rubric, students improved in equal numbers on both organization and writing quality: 24 students (73%) improved, while 9 (27%) remained unchanged in each category. The rubric category for content showed the least amount of improvement: 7 students (21%) improved their scores and 26 (79%) did not change.

**Comparison of data results with and without explicit interaction with feedback.** Once both rounds of quantitative data collection had taken place, it became possible to compare the results of each process to see whether purposeful, directed interaction with the teacher’s feedback had an impact on the students’ writing. The following table shows the comparison of final draft total scores from each round of data collection:

Table 13.

<table>
<thead>
<tr>
<th>Comparison of Final Draft Total Scores</th>
<th>Final Draft Total Score Without Explicit Feedback Interaction (Sept. 18)</th>
<th>Final Draft Total Score With Explicit Feedback Interaction (Oct. 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>22</td>
<td>24</td>
</tr>
<tr>
<td>Mode</td>
<td>21</td>
<td>24</td>
</tr>
<tr>
<td>Mean</td>
<td>21.69</td>
<td>23.06</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>2.68</td>
<td>2.68</td>
</tr>
</tbody>
</table>
Table 13 shows that the mean, median, and mode were all improved by at least 2 points when students were given a model and process for how to interpret and implement feedback compared to when they were simply told to revise their papers without further direction. Therefore, it illustrates an answer to the research question: *How does purposeful interaction with teacher feedback impact the writing outcomes of high school students?* In this case, it appears that purposeful interaction with teacher feedback led to higher scores on the writing assignment. Given that the rubric was out of 27 points total, a gain of 2 points is a 7% improvement.

It is also valuable to compare the percentages of the number of points students improved for each round of data collection; the table below does so:

Table 14.

<table>
<thead>
<tr>
<th>Comparison of Score Changes</th>
<th>Score Changes Without Explicit Feedback Interaction (Sept. 18)</th>
<th>Score Changes With Explicit Feedback Interaction (Oct. 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total score declined</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Total score remained unchanged</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Total score improved by 1 point</td>
<td>44%</td>
<td>24%</td>
</tr>
<tr>
<td>Total score improved by 2 points</td>
<td>19%</td>
<td>30%</td>
</tr>
<tr>
<td>Total score improved by 3 points</td>
<td>0%</td>
<td>33%</td>
</tr>
<tr>
<td>Total score improved by 4 points</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>Total score improved by 5+ points</td>
<td>3%</td>
<td>6%</td>
</tr>
</tbody>
</table>
Table 14 illustrates another answer to the research question: *How does purposeful interaction with teacher feedback impact the writing outcomes of high school students?* In this case, deliberate interaction with teacher feedback allowed for all students to improve their paper scores, rather than some students' scores remaining unchanged or even declining in points from first draft to second draft; this is a major difference from the first round of data collection when students did not have a process to purposefully interact with teacher feedback and 6% did not have a positive improvement in score from first to final draft. Additionally, students made greater gains when they had a process for interpreting and implementing the feedback. On the first round of data collection without feedback interaction, the students who improved their paper scores only did so by 1 or 2 points with the exception of one outlier. However, when deliberately interacting with the teacher feedback, 75% of students improved their score by at least 2 points with the majority (33%) improving by 3 points.

**Qualitative Data Collection Results**

The qualitative data is comprised of the results of an anonymous student survey, which was given twice - directly after students submitted final drafts for each of the paper assignments; information self-reported by students on the Feedback Interaction Form (Appendix D) during their revision of the second paper assignment; observations from the teacher’s Reflective Journal entries made throughout the data collection process; and written observations and reflections that students included in their weekly email to parents, a routine classroom assignment, that was sent on October 6, two days after students completed their second revision assignment.
Student survey results. In both rounds of data collection, students completed an anonymous survey (Appendix B) via Google Forms in class immediately after submitting their paper final drafts. Each survey contained 8 questions; 7 of the questions were identical on both surveys, while one changed from the first to the second. The first survey asked students “Do you speak a language other than English at home?” purely to collect demographic information for this study. The second survey asked the open-ended question “Is there anything else you want us to know about your paper or the process of writing/revising it?” instead of the language question. The results of 3 of the survey questions have been omitted from the explanation below as they all related to how students felt about various aspects of their writing. In reflecting on the results of the study, I do not believe I gathered enough data to show anything conclusive about student perceptions of their writing; additionally, too many other factors come into play to skew the results for these questions. This is an area for further study that will be discussed in chapter 5. Below are the results of 4 survey questions compared between the two rounds of data collection:

Table 15.

<table>
<thead>
<tr>
<th>Question: How helpful was it to receive feedback on your paper?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>It helped me a lot.</td>
</tr>
<tr>
<td>It helped me some.</td>
</tr>
<tr>
<td>It did not help me at all.</td>
</tr>
</tbody>
</table>
The results of Table 15 indicate that students found the feedback more helpful when they had a process for how to interpret and implement it. Additionally, the fact that no students answered “It did not help me at all.” for either round of data collection indicates that teacher feedback in general is a valuable part of the writing and revision process for students.

Table 16.

<table>
<thead>
<tr>
<th>Question: Did you read the comments on Turnitin?</th>
<th>Answer</th>
<th>Percentage for Round One</th>
<th>Percentage for Round Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>90.3</td>
<td>80.6</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>3.2</td>
<td>9.7</td>
<td></td>
</tr>
<tr>
<td>I read some but not all of the comments.</td>
<td>6.5</td>
<td>9.7</td>
<td></td>
</tr>
</tbody>
</table>

The results shown in Table 16 are interesting in that they were not expected and in some ways do not align with the results of the other student survey questions. The fact that fewer students indicated that they read the comments on Turnitin during the second round of data collection could be the result of many factors. One possibility is that after going through the think-aloud modeling process with the example paper, students felt more confident about their ability to revise and therefore did not feel the need to read the Turnitin comments.
Table 17.

<table>
<thead>
<tr>
<th>Question:Did the feedback cause you to make changes to your paper?</th>
<th>Answer</th>
<th>Percentage for Round One</th>
<th>Percentage for Round Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I made numerous changes based on the feedback.</td>
<td>54.8</td>
<td>64.5</td>
<td></td>
</tr>
<tr>
<td>I made some changes based on the feedback.</td>
<td>45.2</td>
<td>35.5</td>
<td></td>
</tr>
<tr>
<td>No, I did not make changes based on the feedback.</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Table 17 shows that students believed they made more changes to their paper when they had a process for how to interpret and implement the teacher’s feedback. Additionally, the fact that no students answered, “No, I did not make changes based on the feedback.” for either round of data collection indicates that teacher feedback is an important part of the writing and revision process as it compels students to make changes to their work.

Table 18.

<table>
<thead>
<tr>
<th>Question: Do you believe receiving feedback will improve your final score?</th>
<th>Answer</th>
<th>Percentage for Round One</th>
<th>Percentage for Round Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>83.9</td>
<td>93.3</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>I’m not sure.</td>
<td>16.1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
Table 18 shows a nearly 10% increase in the number of students who answered “Yes” to the question “Do you believe receiving feedback will improve your final score?” This illustrates that the process of deliberately interacting with the teacher’s feedback may improve students’ confidence in their ability to successfully revise their papers. However, the fact that 6.7% indicated they did not believe receiving feedback would improve their final scores is concerning and confusing. One possibility is that the process of doing the think-aloud with the example paper was overwhelming or too cognitively challenging for some students and led them to doubt their ability to interpret and apply the feedback.

**Feedback Interaction Form results.** Students completed the Feedback Interaction Form (Appendix D) as part of their revision process on the second paper assignment. They used the form as a tool to help process the feedback they had received on Turnitin along with the scored rubric from the first draft of the paper. The form asked students to answer 5 questions about their feedback and how they intended to implement it. Following are the results of the students’ responses for each questions.

Table 19.

<table>
<thead>
<tr>
<th>Question: Do you understand what the comments on your paper/scores on your rubric mean?</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>91%</td>
</tr>
<tr>
<td>No: Comments I don’t understand __________</td>
<td>3%</td>
</tr>
<tr>
<td>I understand what some of them mean.</td>
<td>6%</td>
</tr>
</tbody>
</table>
The one student who checked the option for “No” wrote “fragment” on the line. This student’s question was addressed during the revision process, and the student successfully rewrote fragments to make them complete sentences.

Table 20.

<table>
<thead>
<tr>
<th>Question: Do you understand how to make the changes to your paragraph based on these comments?</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>91%</td>
</tr>
<tr>
<td>No: I don’t know how to fix ___________</td>
<td>9%</td>
</tr>
<tr>
<td>I understand how to make some of the changes.</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 21.

<table>
<thead>
<tr>
<th>Question: How do you feel about your ability to revise your paragraph and improve your score?</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am confident that I can make significant revisions to earn a higher score.</td>
<td>61%</td>
</tr>
<tr>
<td>I know how to fix a few things to improve my score by a point or two.</td>
<td>30%</td>
</tr>
<tr>
<td>I’m still not sure I know what to do in order to earn a higher score.</td>
<td>0%</td>
</tr>
<tr>
<td>I don’t think I can make the revisions necessary to improve my score.</td>
<td>0%</td>
</tr>
</tbody>
</table>
Two students checked two boxes for the above question; both checked “I am confident that I can make significant revisions to earn a higher score.” and “I know how to fix a few things to improve my score by a point or two.” One student did not indicate a response to this question.

Students were also asked the question “What three changes will you make to your writing based on the feedback you received?” Students checked boxes next to 3 of 12 statement options listed; all statements directly reflected the categories on the rubric and the feedback given in Turnitin. For example, one option was “I will add more supporting points.” Another was “I will eliminate run-ons.” While grading students’ revisions from first draft to final draft, the successful implementation of the 3 changes indicated was measured and is shown in the table below:

Table 22.

<table>
<thead>
<tr>
<th>Successful Implementation of Changes Indicated on Feedback Interaction Form</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students successfully implemented all 3 indicated changes</td>
<td>27%</td>
</tr>
<tr>
<td>Students successfully implemented 2 of 3 indicated changes</td>
<td>39%</td>
</tr>
<tr>
<td>Students successfully implemented 1 of 3 indicated changes</td>
<td>15%</td>
</tr>
<tr>
<td>Students did not successfully implement any indicated changes</td>
<td>18%</td>
</tr>
</tbody>
</table>

The 6 students (18%) who did not successfully implement any of the changes they indicated on the Feedback Interaction Form all answered “Yes” to the questions represented on Table 18 and Table 19. This illustrates a disconnect in their perceived and actual abilities to revise their writing.
The final question on the Feedback Interaction Form was open-ended: "What additional support do you need to be able to make revisions to your paper?" A small number of students answered this question with a response other than “none” or “nothing”. Their responses follow: “not sure”; “more feedback”; “I feel like I need like more explaining on what I need to fix and a little more feedback”; “no other than some help from the teacher”; “need help on transitions”; “Nothing else. I have enough info from what you gave me”; “sheet that has transition words, FANBOYS [a common acronym used at the school to remember conjunctions], etc.”; “to learn how to use commas more effectively in my writing”; “I just need to repesend [illegible] it”.

**Observations made by students and teacher.** This qualitative data was collected through multiple entries made in the researcher’s reflective journal throughout the research process as well as observations made by students in their regular weekly email assignment. Each Friday students send emails to their parents/guardians that includes a reflection on the week’s learning targets. On Friday, October 6, two days after revising their second paper using the Feedback Interaction Form, students reflected on the learning target “I can write clearly and coherently.” Some of their responses illustrated further insights into the process of deliberately interacting with feedback and their perceptions about the effect this had on their writing.

One theme found in the email responses that supports the results of the student survey responses shown in Tables 15, 17, and 18 was that students felt an increased sense of confidence in their writing after revision and ability to implement the feedback they had received. For example, one student wrote, “I think I did really well on my paper writing
assignment. After I did my revisions I felt way more confident in my paper, and I think it was way better than the first score. I think after I understood different revision skills [from the think-aloud model paper] it was way easier to fix my errors in my paper.” Another student said, “In my revision I had a lot of fragment error and punctuation error. As I read my paper again I started to understand my mistakes and I fixed it. And I feel like I will get more points on my revision paper.” This student did, in fact, identify fixing fragments as one of the top three priorities on the Feedback Interaction Form and successfully corrected them on the final draft. Another comment written in an email was “My writing has improved a little bit over the past weeks. I did very well on my paper and revision.”

However, Table 22 illustrated a disconnect between some students’ perceived and actual abilities to revise their writing. The 6 students (18%) who did not successfully implement any of the changes they marked on the Feedback Interaction Form all answered “Yes” to the questions represented on Table 18 and Table 19, indicating that they understood the feedback and how to implement it when, in actuality, they did not. This disconnect was also apparent in a few students’ email responses. One, for example, wrote, “We wrote a paper about school and I only had two mistakes that I had revise.” This student actually had numerous complex revisions that needed to be made and did not successfully implement any of them indicated on the Feedback Interaction Form. The question that arises from this is how a teacher can bridge the gap between a student’s perception about his ability and his actual ability. Even when a teacher has given significant feedback and enacted a process for implementing it, some students still have misconceptions about their own writing or how to revise it.
In reviewing the four journal entries that I wrote during the research process, a few major ideas stand out. The first are some observations I’m able to make about engagement during the writing process. On both journal entries completed immediately after students wrote their first draft of each paper, I noted that engagement was fairly high when writing the initial paper draft. For example, on September 14, I wrote this about second hour:

“Students got to work quickly; most seemed to easily come up with a topic to write about, while a few used one of the topics (bullying) given as an example when explaining the task. Everyone on task quietly; some spent time changing their music selections but otherwise were not looking at other things on their laptops or talking to peers.” This is a notable observation as my second hour is typically a class that struggles to remain focused during a solitary task; they often have to be redirected from having side conversations or using their phones or laptops inappropriately. I did also note, however, that some of my students who tend to struggle more took longer to come up with a topic and generate content; this was especially apparent when writing the second paper because we did not give the students examples of how to respond to the prompt as we had with the first paper.

In contrast, I noted that engagement appeared to be lower when revising writing. For example, on September 18, when students were making changes to their first paper, I noted the following: “Much lower level of engagement than when initially writing first draft. Students talked to peers about unrelated topics and had a hard time getting into their work.” This makes me wonder if the task of revising is more cognitively demanding because students are not only dealing with their own ideas, but also the ideas from their
teacher about their writing. If that is the case, students may have been trying to avoid doing the more challenging task.

Another possibility is that students were less invested in the revision process because they may have felt they already had done enough by generating the content in the first place and they did not feel motivated to try and improve their scores. In my journal I wrote, “After one student realized his grade could improve by making changes, he got to work more diligently.” This may especially have been true for the first paper when students were only told to revise their papers without any more specific direction. For some students, the lower level of engagement may have been due to the fact that they did not know what to do; I overheard one conversation between two students in which one questioned what it meant to revise and the other student said to “make changes” to your paper. This exchange was noted during the revision of the first paper when students had not been taught a method for interacting with feedback.

There are also some interesting observations that can be made when contrasting the journal entries from when the students were directed how to interact with the feedback versus when they were not. On September 18, during the first paper when students had not been given a tool for interpreting feedback, I wrote: “Most students did not appear to look at the scored rubrics very carefully. Ex: A student asked what to do when he was done, and when I asked him if he had added transitions to his paper (he’d scored beginning on this category of the rubric), it was clearly not something he’d even looked at or considered.” This confirmed for me something I’ve long suspected; unless given clear, specific, tangible
tools for interpreting a teacher’s comments, students will not feel empowered to make changes to their writing.

While revising the second papers, I noted “high levels of engagement/participation while doing the modeling/think aloud with the example.” However, I also wrote down some comments the students made during the modeling process that indicated some possible avoidance or stress regarding how to apply the information they were gathering to their own writing. One said, “This is boring” while another said, “I’m just going to rewrite my whole thing.” To me, this illustrates that taking the time to walk students through the process of closely examining feedback may be overwhelming or cognitively challenging, but it also leads to both better writing quality and higher engagement when revising.

**Conclusion**

My objective in enacting this research project was to determine whether being explicitly instructed how to interact with feedback and implement it would have an impact on student writing. The project also examined student perceptions about the revision process and their ability to interpret and use feedback given by the teacher. In this chapter, I have presented both qualitative and quantitative data to answer the research question: *How does purposeful interaction with teacher feedback impact the writing outcomes of high school students?* Chapter 5 will discuss major learnings, limitations and implications of this study, and potential areas for further research on this topic, as well as my own reflection on the process of enacting action research.
CHAPTER 5

Conclusion

Overview

The previous chapter presented both the qualitative and quantitative results of my research process that aimed to answer the question: How does purposeful interaction with teacher feedback impact the writing outcomes of high school students? Through examining the data, I was able to draw conclusions about the impact that interacting with feedback has on improving students’ writing as well as their engagement along with the impact it has on their own perceptions of their writing and ability to revise. Chapter 5 includes my own reflection on the process of undertaking action research with my students; the major findings of my study; and possible implications, limitations, and next steps.

Reflections on the Capstone Process

The year that I spent on this Capstone was eye opening, affirmative, and absolutely transformative. Thinking back to the early months of my thesis when it was still in its formative stage, it is now obvious to me that my topic would focus on writing instruction. Although I am an invested teacher in all facets of literacy, writing is clearly my passion area. I absolutely love teaching students strategies for improving their writing and seeing them have “ah ha” moments and take pride in what they’ve composed. I know that students must develop adequate writing skills in order to successfully function in school and in life, but I also know that it is one of the most complex skills to learn (Graham & Harris, 2016; Gunke & Leonard-Zabel, 2015; Wilhelm, 2014). My earliest memories as a student involve writing,
and, as explained in Chapter One, some of these memories are about the feedback I received and the lasting impact this feedback had on me as a writer.

In my ten years as an English teacher, writing has not only been an area about which I am passionate and find joy, but it has also been a source of frustration. I have spent countless hours grading papers only to find that sometimes students seemingly did little to improve their writing. I cannot begin to recount the many conversations I have overheard or engaged in with my colleagues about this: “We told them what they did wrong, now why won’t they just fix it!” As I began to study what other researchers had found concerning feedback and consider my own experiences as a student and a writing teacher, I realized the point of disconnection. It is not enough to simply give feedback. As Fisher, Frey, and Hattie (2016) explained, “it’s only when the feedback is received that it works” (p. 32). And I came to realize that students cannot “receive” feedback unless they explicitly learn how to interpret what it means and apply it.

This realization absolutely transformed the way I view writing instruction. Previously, I gave little time and attention to the revision process as compared to the other stages of writing. I provided students feedback on their work and asked them to revise their papers, but, in doing so, I made a lot of assumptions about their ability to interpret my feedback and know what to do with it. The process of conducting action research has shifted my view about the importance of the revision stage of the writing process and the time and attention it is given. Now I believe that revision not only means giving students feedback and asking them to improve their writing, but it also requires using scaffolds to support them as they make sense of the feedback, consider the implications of applying it
to their work, and then prioritize how to implement it. This can be a complex and time consuming process, but I no longer believe it can be omitted from the writing process if students are to truly grow as writers.

In addition to changing my perspective and instructional methods, the process of completing action research also reinvigorated my teaching practice. While it has been a great deal of work to complete, it has also given me a focus and drive that was previously missing. Rather than just thinking about the curriculum I need to teach, I have found a larger sense of purpose and meaning in my work. Engaging in action research has empowered me as a teacher and made me realize that I must continue to learn and grow alongside my students rather than allow myself to become stagnant and set in my ways. Now I feel excited to try new things in my classroom and see what impact they have, especially when it concerns writing.

Conducting research and examining student data for my Capstone has given me confidence and intention in doing so for other areas of my teaching as well. Our Professional Learning Communities (PLC) at school are asked to examine student data and discuss the instructional practices that led to our results on a weekly basis. Prior to completing my action research for this project, I did not consider myself a teacher researcher and did not feel confident about examining and discussing my data. As a PLC lead this year, I have felt more competent and confident about leading my team in data-driven discussions about our teaching practices. I owe this to my thesis process. I now see the power in collecting data and using it to inform my practice, and I view myself as a
teacher researcher who will continue to study the impact of feedback even after this project is done.

**Return to the Literature Review**

The literature review in Chapter 2 focused on three separate areas of research: writing development, feedback, and student motivation in the writing process. No research was found specifically on the topic of student interaction with teacher feedback, so I had to draw conclusions about the intersection points of each body of information. All of the research was helpful in providing background knowledge that was essential to developing and answering my research question. After conducting and reviewing my research, however, there are a few particular areas that were most relevant to the study.

**Importance of feedback.** While my review of the research uncovered a great deal of information about many specific aspects of the conditions of delivering feedback, the most significant to me was the literature that cited the overall importance of feedback. Although I entered into this project already believing that feedback is important for teachers to provide, my belief was strengthened and enhanced by the literature. Feedback is essential in that it illuminates discrepancies between the students’ current performance or understanding in comparison to the desired standard (Dinnen & Collopy, 2009; Hattie & Timperley, 2007) and acts as a scaffold to support students in doing what they could not otherwise do on their own (Dinnen & Collopy, 2009). In order to be effective, it must be specific enough to bridge the divide between what the student currently can do and what outcome he or she is striving for, and the student must know what steps to take in order to improve (Hattie & Timperley, 2007).
I put these findings into practice as I designed my research study. In the second round of data collection, students received explicit instruction on what steps they needed to take in order to improve their papers. They received specific feedback tied to the grading rubric that was meant to guide their paper revisions. The most effective feedback explains not only why something is incorrect, but also provides an explanation of how to fix it (Dinnen & Collopy, 2009). While I did not provide an explanation of how to fix every error via written feedback on students’ papers, I did give this type of corrective feedback when doing my think-aloud modeling with the example paper. As my findings in the next section indicate, providing specific feedback related to the rubric, which articulated the desired standard, and techniques for how to implement it successfully served as a scaffold to help my students improve their writing. I also provided immediate feedback, which the research showed was preferable (Fisher, Frey & Hattie, 2016; Goodwin & Miller, 2012), and chose specific areas of focus to guide my feedback - only the three areas covered on the rubric - rather than overwhelming students with feedback, which is not beneficial to them (Fisher, Frey & Hattie, 2016; McGrath, Taylor & Pychyl, 2011).

Although little research exists about the effects of interacting with feedback, Hattie & Timperley (2007) in their extensive meta-analysis acknowledged that “The ways and manner in which individuals interpret feedback information is the key to developing positive and valuable concepts of self-efficacy about learning, which in turn leads to further learning” (p. 101). As my findings below indicate, I also found this to be true. Student motivation and confidence improved during the round of data collection in which they had
been explicitly taught how to interpret, prioritize, and implement the feedback they had received.

**Importance of the process writing approach.** The second area of the literature study that was most relevant to my own research project focused on the effectiveness of implementing a writing process. As with the area of feedback, the vast majority of information about the importance of utilizing a process approach to writing was already known to me and integrated into my own practice as an English teacher. The research supported my preexisting beliefs that writing is one of the most important skills for students to master in order to be successful in school and in life (Grunke & Leonard-Zabel, 2015; Wilhelm, 2014), but it is also one of the most complex skills to learn (Graham & Harris, 2016; Grunke & Leonard-Zabel, 2015; Wilhelm, 2014).

One of the reasons it is so difficult to learn is that the development of advanced writing skills does not seem to follow a fixed set of stages, and people can always continue to improve their writing unlike other skills that may have a terminal point of mastery (Grunke & Leonard-Zabel, 2015). With my own students, I have seen over and over that they are so consumed with meeting lower-level cognitive writing tasks such as spelling, capitalization, punctuation, and typing that they cannot give attention to the more cognitively demanding aspects of writing such as content development, audience, organization, and voice (Grunke & Leonard-Zabel, 2015). I observed these points as being true in my undertaking of this study and attempted to mitigate them by using a process approach to writing.
Research consistently shows that using a writing process in the classroom, also known by other names such as Writer’s Workshop or Self-Regulated Strategy Development (SRSD), has a positive effect on writing outcomes (Graham & Harris, 2016; Graham & Sandmel, 2011; Grunke & Leonard-Zabel, 2015). This model calls for using distinct stages in the task of generating text: planning, writing, and revising. The research cited numerous instructional strategies within each stage that lead to positive outcomes for student writers. For my own study, I implemented an approach to writing that involved a process for students to follow. Because of my research question’s attention on feedback, my focus was on the revision or review stage of the writing process.

As I have witnessed with my own students, the revision stage can be the most difficult due to negative attitudes students may have about returning to their work, sometimes viewing revision as “punishment” (Callison, 2014). Students often do not know how to effectively revise their writing (Callison, 2014), so the explicit teaching of revision strategies is a necessary component of writing instruction (Graham & Sandmel, 2011). I did notice some negativity toward revision while undertaking this project but attempted to thwart it through how I presented the task. When students understood that the categories circled on the rubric were not final, but rather indicative of where they currently stood in relation to the desired outcome, and that their scores would be improved by implementing changes, motivation increased. I found that this was especially true during the second round of writing and data collection when students were explicitly taught revision strategies and prioritized the changes they needed to make prior to undertaking revision.
Major Findings

This section presents the major findings of my study that answer the research question: *How does purposeful interaction with teacher feedback impact the writing outcomes of high school students?* The findings are supported by both quantitative and qualitative data, but leave many questions that could be potentially addressed through further research in the future.

**Explicit interaction with teacher feedback led to better writing scores.** First, student writing improved more as a result of enacting a process through which students interpreted and implemented teacher feedback as compared to when they were not given direction on how to explicitly interact with the feedback. As defined in Chapter 2, feedback is information provided through various means about components of one’s understanding or performance (Hattie & Timperley, 2007). It shows where a student’s performance or knowledge lies in relation to the desired standard and supports students to do what they otherwise could not do independently (Dinnen & Collopy, 2009; Hattie & Timperley, 2007). In relation to this study, the written feedback provided via Turnitin and on the students’ rubrics had the greatest impact when students explicitly interacted with it.

This was shown through the data presented in Table 13: the final draft total score mean, median, and mode were all improved by at least 2 points between the first round of data collection, when students were simply asked to revise their first draft, and the second round of data collection, when they were taught a process by which to make meaning of the teacher’s feedback and then apply it to their papers. On the 27 point rubric used (Appendix A), 2 points is a 7% gain, which is significant in terms of making a difference on the grading
scale. While the content scores remained virtually unchanged between the first and second rounds of data collection, both the writing quality and organization scores were higher by at least 1 point in the second round of data collection as well.

Additionally, the general rate of student improvement not only increased, but individual student scores also made greater gains when they had a process for interpreting and implementing the feedback. On the first round of data collection without deliberate feedback interaction, the students who improved their paper scores only did so by 1 or 2 points with the exception of one outlier. However, when explicitly interacting with teacher feedback in round two, 75% of students improved their score by at least 2 points with the majority (33%) improving by 3 points. During the second round of data collection, 12% of students improved their scores by 4 or 5 points, which is a significant difference from the first round of data collection when only the one outlier made such a large gain.

These data sets all demonstrate the importance of writing teachers providing instruction on how to interpret and implement the feedback they provide, rather than simply assuming that students know what the feedback means and how to use it. The results show that, when left to their own interpretation and devices, students often simply don’t understand, have misconceptions about, or are not able to effectively implement the feedback their teachers provide on their writing. If a teacher wants to ensure that students actually use the feedback to improve their writing, they need to also provide the time, instruction, and support on how to do so.

Future researchers may want to explore the effectiveness of using different ways for students to interact with teacher feedback on writing. My study contained multiple aspects
to the process that could be isolated and examined. For example, I used a think-aloud instructional strategy with a model paper to show students how to make meaning of the comments I had written on their papers; we discussed several comments, and students provided ideas as to how they could make changes to the paper to improve it. Another researcher may want to examine the effectiveness of a different way for students to interpret and apply feedback. Additionally, I developed and used the Feedback Interaction Form (Appendix D) for students to examine the feedback provided and prioritize the changes they needed to make to their papers. Another researcher may want to develop or explore the use of different tools or methods through which to have students prioritize their necessary revisions.

**Explicit interaction with teacher feedback led to all students improving their writing, not just some students.** In addition to the first finding that explicit feedback interaction led to better writing scores in general, I also found that every student’s final draft score improved rather than just some students’ scores improving. During the first round of data collection, of the 36 students whose total paper scores were examined, 24 of them (67%) showed improvement from first draft to final draft, while 1 student’s score declined and 11 (31%) remained unchanged. This is markedly different from the second round of data collection in which every single one of the 33 students (100%) whose total paper scores were examined showed improvement from first draft to final draft.

Although I do not have quantitative data to support this claim, I don’t know if ever before in my ten years of teaching have I had every student improve his or her paper score when offered a chance to revise it. Typically, I have found that some students are
unmotivated or unable to revise their papers, while a smaller group of more “motivated” or “able” students did so. Anecdotally I can note that students often say that they are satisfied with their scores or they don’t seem to want to put in the effort necessary to improve their writing because it’s “good enough”. It may also be that what I previously perceived to be a lack of motivation was actually a lack of understanding or an inability to make the necessary revisions that prohibited some students from fully utilizing the opportunity to revise.

This is a finding that I believe needs to be studied further as I have no current evidence that it can be replicated. I fully intend to continue using the method devised for this action research project as well as other methods by which students will interact with feedback on their writing, and I will continue to monitor whether it leads to all students being able to improve their paper scores. Additionally, because the sample size for my study was relatively small, it would be interesting to see if these results would remain the same when implemented in a larger research setting.

**Students’ confidence was greater when they were taught a process by which to interact with teacher feedback.** In addition to improving students’ writing scores, the process of teaching students how to decode their teacher’s feedback and determine how to apply it to their own writing led to increased confidence. The comparison of results on several Student Survey (Appendix B) questions supports the finding of improved confidence in the ability to successfully revise. Table 17 illustrates the comparison of results in each round of data collection for the survey question: “Did the feedback cause you to make changes to your paper?” After the first round of data collection in which
students did not have a supported process for interpreting the feedback, 54.8% answered “Yes, I made numerous changes based on the feedback.” There was a nearly 10% gain in the response to this survey answer when students were provided a directed method for interacting with the feedback; in the second round of data collection, 64.5% of students chose this answer option. I believe these question results are indicative of increased confidence as students would not answer affirmatively if they did not feel they had successfully been able to make the necessary changes based on the feedback they received.

Additionally, the results presented in Table 18 support this finding: it shows a nearly 10% increase in the number of students who answered “Yes” to the question “Do you believe receiving feedback will improve your final score?” from first round of data collection to the second. The Feedback Interaction Form (Appendix D) presents data that corroborates the previous points. On it, 61% of students indicated “I am confident that I can make significant revisions to earn a higher score.” and 30% answered “I know how to fix a few things to improve my score by a point or two.” when asked the question “How do you feel about your ability to revise your paragraph and improve your score?” All of these qualitative data points seem to illustrate that the process of deliberately interacting with the teacher’s feedback improves students’ confidence in their ability to successfully revise their papers.

Students also shared their feelings of increased confidence in their weekly progress report emails without being prompted. One, for example, wrote, “I think I did really well on my paper writing assignment. After I did my revisions I felt way more confident in my paper, and I think it was way better than the first score. I think after I understood different
revision skills [from the think-aloud model paper] it was way easier to fix my errors in my paper.” This is just one of numerous such statements. When considered together, the qualitative results from some of the Student Survey questions, the Feedback Interaction Form, and the students’ own comments when asked to reflect on their ability to revise all indicate that teaching students a deliberate process for interpreting and implementing feedback leads to increased confidence.

However, the data also illuminates a few confusing or troubling data points that give cause for further research on the topic of confidence as it relates to the revision process. The study showed a disconnect between some students’ perceived and actual abilities to revise their papers. Some of them indicated on their Feedback Interaction Form that they understood how to make changes to their paper and were confident that they could do so, but then they did not actually implement the prioritized changes that they selected. Additionally, some indicated on the Student Survey that they did not believe receiving feedback would improve their final scores; this is both concerning and confusing. These are both areas where potential future research could uncover useful information. My study did not collect enough data to provide insight or a hypothesis as to why this dissenting data emerged.

**Identification of specific changes that needed to be made led to greater implementation of teacher feedback.** It appears that having students both identify and prioritize the changes they needed to make to their papers from a list of possibilities before beginning the revision process led to an outcome in which a high percentage successfully made revisions to those aspects of their writing. In the first round of data collection,
students received the same type and quantity of feedback as in the second round of data collection, but they were simply told to revise their papers. They had to undertake the complex process of reading the comments, interpreting them, determining how to make changes and which changes were the most crucial to prioritize without any support for how to do so. In the first round of data collection, I observed that many students only fixed the more straightforward, simple, easy to change errors. For example, they corrected comma, apostrophe, spelling, or capitalization errors that were specifically pointed out to them. They generally did not make more complex revisions such as adding explanation, transitions, or other missing paragraph components.

However, in the second round of data collection, when students completed the Feedback Interaction Form (Appendix D) before beginning the revision process, students were observed making more significant, cognitively difficult changes to their papers. For example, they added explanation, fixed or added topic and concluding sentences, eliminated run-ons, and incorporated transitions between ideas. They also made the same types of straightforward grammatical changes as when revising the first paper, but their revisions now included more challenging writing tasks. I hypothesize that this was not only due to modeling a process for interpreting and implementing feedback before making revisions on the second paper, but also because students had to commit to choosing three changes they were going to make on the Feedback Interaction Form. Completing this step gave them a focus for revision rather than leaving them possibly feeling overwhelmed by the amount of feedback they had received and the changes they needed to make, therefore defaulting to the “easy” or “obvious” changes.
While grading the final draft of paper two, I also examined each student’s Feedback Interaction Form and marked which prioritized changes were actually successfully implemented. The results of this data collection showed that 27% of students successfully implemented all three of the changes they indicated on their Feedback Interaction Form; 39% implemented two of the three indicated priorities; 15% implemented one of three. This is not to say that students did not make other changes that they simply did not identify on the Feedback Interaction Form, or that more students did not at least attempt to make changes to their chosen priorities, but I only counted those who had done so completely and correctly. This means that 81% of students correctly revised at least one of the areas they identified.

However, 18% of students did not successfully implement any of the changes noted on their Feedback Interaction Form. This was discussed in the previous section as a possible area for future research due to a potential disconnect between students’ perceptions about their ability to revise and their actual ability to do so. It could also lead to other areas of research. For instance, researchers may want to study other methods and tools for having students prioritize their necessary revisions. Perhaps the Feedback Interaction Form seemed cumbersome to some students or they did not complete it accurately as it did not feel meaningful to them. I intend to continue trying different methods of having my students interact with the feedback they receive and prioritize the revisions they need to make. For example, I recently had students examine the scored rubric and written comments they received on a summary paper they wrote. Before writing another summary paper, they circled the areas on the rubric in which they lost the
most points on the first paper and then listed the three things they are going to do differently when they write their next summary paper. This is a different way than the Feedback Interaction Form to have them do a similar metacognitive task. Future researchers may want to study which of these methods of interpreting and prioritizing feedback is most effective.

**Possible Implications**

Based upon the conclusions drawn from my data collection and analysis, writing teachers should not provide feedback to students without also providing appropriate scaffolds for how to interpret and implement it in their own writing. Giving feedback to students without teaching them how to use it is like giving solid food to an infant; they can’t ingest it without having it broken down first. Previous research focused on the impact of the content of feedback as well as variables related to its dissemination: method of delivery, timeliness, quantity, etc. My research determined that explicit interaction with teacher feedback led to better writing scores as well as improvement for all writers, not just some. Additionally, I found that students’ confidence was greater when they were taught a process by which to interact with teacher feedback. When they prioritized and indicated changes they intended to make to their writing, there was a greater implementation of this feedback. These findings indicate that simply providing feedback is not enough. It doesn’t matter how much feedback is given, if it’s delivered verbally or in writing, how timely it is, or whether it’s corrective or descriptive if students don’t have a process by which to make meaning of the feedback, learn methods by which to implement it, and then prioritize and indicate which revisions they are going to make to their writing.
**Possible Limitations**

There were a few limitations to this study, one of which was the impact that my own biases and the subjective nature of grading student writing could have potentially had. Because I graded all of my students’ papers and they were not anonymously submitted, there is certainly the possibility that my own biases and knowledge of my students subconsciously impacted the way that I graded their papers. Additionally, there are many outside factors that can impact the way a teacher grades writing: time of day, state of mind, environmental factors, and more. Even when using a very clear, objective rubric, there is always a small degree of subjectivity when grading writing.

Another limitation is the possibility of confirmation bias. I entered into this study with the hope that having students interact more deliberately with my feedback would lead to improved outcomes on their writing. Because of this hope, it is possible that I would have a tendency to score their papers in such a way that the data would reflect that desire. However, I was very conscious of this upon beginning the project and took every measure possible to mitigate it. For example, when grading the students’ final paper drafts in the second round of data collection, I opened each one’s first draft in Turnitin to compare alongside the final draft. I examined every change closely in relation to the first draft before awarding additional points to the final paper score. This ensured that my final scores were accurate and not falsely inflated by my hope that scores would improve.

My sample size for this study was relatively small; a larger sample size may yield different results. Additionally, the data collection was done over the course of six weeks. Setting up the study differently by measuring the impact over a longer period of time or
having different groups of students interact with feedback in different ways may garner different results.

Finally, there was virtually no existing research explicitly about the impact of interacting with feedback from which I could draw. There was a great deal of research pertaining to the impact of different methods of delivery and types of feedback given, and there is a large body of research about writing instruction, but these did not provide an answer to my research question. The literature review for this project drew upon the research that was available but had to synthesize the various separate bodies of research to make inferences about how they pertained to my specific question.

Next Steps

Sharing the results of this study with my own departmental colleagues and other educators in my building and district may impact how we approach writing instruction. In the large, diverse setting in which I teach, our department consists of more than 20 English teachers with a wide range of practices related to writing instruction. While I can say with a high level of certainty that all of my colleagues give students feedback on their writing, albeit of differing quantities and through different means, I can also say with confidence that not all of us explicitly teach students how to interpret and apply this feedback to their writing. My hope is that sharing my findings with my colleagues will result in valuable benefits and changes to their own practices that will positively impact writing outcomes for students.

Additionally, I plan to share my results with my administrators and building instructional coaches who can disseminate the information to a wider audience as they see
Students write in many other content areas, and what I have learned about purposeful interaction with teacher feedback could apply to numerous subject areas beyond English. Our building currently has an ongoing, embedded professional development model, so perhaps I will be able to share my findings with building colleagues at a future learning session. In addition to dispensing the results of my research locally, a wider audience may benefit from it as well. I will consider finding additional outlets for distributing my results to other writing instructors and interested stakeholders, such as the Minnesota Council of Teachers of English or the National Council of Teachers of English.

Finally, throughout the remaining three terms I have with my students this year, I intend to continue monitoring their progress as writers and examining the outcomes of different ways they interact with the feedback they receive. My teaching team has agreed to keep using the rubric (Appendix A) developed for this study so that we have continuity in measuring our students’ writing. We have already tried another method besides using the Feedback Interaction Form (Appendix D) and plan to keep experimenting with different tools and strategies as the year progresses. We have seen and believe in the value of asking students to purposefully interact with feedback and will continue to make it a part of our routine classroom practice so that it becomes habit for both us and our students.

**Conclusion**

In this chapter I reflected on the process of developing my research question, undertaking action research, and the importance of this topic to me both personally and professionally. I revisited the major areas of the literature review that had the most relevance and importance to my study. I analyzed the quantitative and qualitative data to
answer my research question: How does purposeful interaction with teacher feedback impact the writing outcomes of high school students? and shared my major findings. I presented the possible limitations and implications of my study and posited areas for future research on the topic. While this project has come to an end for me, it has left an indelible mark on my instructional practice and my view of myself as a teacher researcher. I now feel more invigorated in my profession and empowered to take on the challenges that come with teaching by trying new approaches and continually learning alongside my students.
REFERENCES


doi:10.5206/cjsotl-rcace.2011.2.5


doi:10.1080/87567555.2013.809328
### APPENDIX A
Paragraph Grading Rubric

<table>
<thead>
<tr>
<th>AREA</th>
<th>PROFICIENT (3)</th>
<th>DEVELOPING (2)</th>
<th>BEGINNING (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content: main idea</td>
<td>Paragraph has a clear main idea.</td>
<td>Main idea is somewhat clear.</td>
<td>Main idea is unclear.</td>
</tr>
<tr>
<td>Content: supporting points</td>
<td>Supporting points reinforce the main idea.</td>
<td>Supporting points are mostly related to the main idea.</td>
<td>Support is not given for the main idea.</td>
</tr>
<tr>
<td>Content: development of ideas</td>
<td>Ideas are well developed and communicated effectively.</td>
<td>Some ideas are developed while others are unclear.</td>
<td>Ideas are not developed or not communicated effectively.</td>
</tr>
<tr>
<td>Content Total: _____/9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization: topic and conclusion sentences</td>
<td>Paragraph begins with a clear topic sentence and ends with a clear conclusion sentence.</td>
<td>First sentence does not clearly indicate topic of paragraph and/or final sentence does not clearly wrap up paragraph.</td>
<td>Topic and/or conclusion sentence is missing.</td>
</tr>
<tr>
<td>Organization: paragraph structure</td>
<td>Ideas are presented in a logical order.</td>
<td>Ideas are presented in a somewhat logical order, although a few may be misplaced.</td>
<td>Ideas jump around in an order that doesn’t make sense.</td>
</tr>
<tr>
<td>Organization: transitions</td>
<td>Transitions are used between ideas.</td>
<td>Some transitions are used.</td>
<td>Transitions are not used.</td>
</tr>
<tr>
<td>Organization Total: _____/9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing quality: sentence structure</td>
<td>All sentences are complete; there are no run-ons or fragments.</td>
<td>Paragraph contains some run-ons or fragments.</td>
<td>Paragraph contains many run-ons or fragments.</td>
</tr>
<tr>
<td>Writing quality: mechanics</td>
<td>Paragraph contains very few spelling, punctuation, and capitalization errors.</td>
<td>Paragraph contains some errors that distract from readability.</td>
<td>Paragraph contains many errors that distract from readability.</td>
</tr>
<tr>
<td>Writing quality: clarity</td>
<td>Sentences are clear, easy to read, and contain fitting vocabulary.</td>
<td>Some sentences are unclear, difficult to read, and contain poorly chosen vocabulary.</td>
<td>Many sentences are unclear, difficult to read, and contain poorly chosen vocabulary.</td>
</tr>
<tr>
<td>Writing Quality Total: _____/9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B
Student Survey

1. How helpful was it to receive feedback on your paper?
   • It helped me a lot.
   • It helped me some.
   • It did not help me at all.

2. Did you read the comments on Turnitin?
   • Yes
   • No
   • I read some but not all of the comments.

3. Did the feedback cause you to make changes to your paper?
   • Yes, I made numerous changes based on the feedback.
   • I made some changes based on the feedback.
   • No, I did not make changes based on the feedback.

4. Do you believe receiving feedback will improve your final score?
   • Yes
   • No
   • I’m not sure.

5. How did the feedback make you feel about your writing?
   • I feel great!
   • I feel okay about it.
   • I feel discouraged.

6. Which category on the rubric do you feel most confident about?
   • Content
   • Organization
   • Writing Quality

7. Which category on the rubric do you feel least confident about?
   • Content
   • Organization
   • Writing Quality
APPENDIX C
Reflective Journal Format

Stage of process:
- Just completed comments/rubrics for “first draft” (first round).
- Just completed comments/rubrics for “final draft” (first round).
- Just completed comments/rubrics for “first draft” (second round).
- Just completed comments/rubrics for “final draft” (second round).

Observations about student writing:

Student comments/questions:

Observations about student attitudes/actions/level of motivation:
APPENDIX D
Feedback Interaction Form

Step 1: Review scored rubric for first draft of paragraph and read comments on Turnitin.

Step 2: Answer reflective questions below while referring to your comments/rubric.

1. Do you understand what the comments on your paper/scores on your rubric mean?
   - Yes
   - No
   - I understand what some of them mean.

2. Do you understand how to make changes to your paragraph based on these comments?
   - Yes
   - No
   - I understand how to make some of the changes.

3. What **three changes** will you make to your writing based on the feedback you received?
   - I will explain my main idea better.
   - I will add more supporting points.
   - I will eliminate sentences that don’t provide support for my main idea.
   - I will add a topic sentence or revise it.
   - I will add a concluding sentence or revise it.
   - I will move sentences in my paragraph so that they are in a different order.
   - I will add transitions.
   - I will rewrite fragments so that they are complete sentences.
   - I will eliminate run-ons.
   - I will fix spelling, punctuation, and capitalization errors.
   - I will rewrite sentences so they are more clear.
   - Other: ________________________________

4. How do you feel about your ability to revise your paragraph and improve your score?
   - I am confident that I can make significant revisions to earn a higher score.
   - I know how to fix a few things to improve my score.
   - I’m still not sure I know what to do in order to earn a higher score.
   - I don’t think I can make the revisions necessary to improve my score.

5. What additional support do you need to be able to make revisions to your paper?
Step 3: Make changes to your paragraph based on your understanding of the feedback.