

2017

Exploring the Use of NoRedInk as a Tool for Composition Instruction

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EXPLORING THE USE OF NOREDINK AS A TOOL FOR
COMPOSITION INSTRUCTION

BY

ALYSON SNOWE

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

RHETORIC AND COMPOSITION

UNIVERSITY OF RHODE ISLAND

2017

DOCTOR OF PHILOSOPHY DISSERTATION

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2017

ABSTRACT

My study, “Exploring the Use of NoRedInk as a Tool for Writing and Composition Instruction,” addresses the questions: (1) How do students experience NoRedInk in the context of a community college writing class? and (2) Is there a relationship between students’ attitudes towards grammar and their performance on the digital platform? Despite a century of research showing that traditional grammar instruction does not improve students’ writing, recent national standards and high stakes tests directly address grammar.

The nature of my research questions lent itself to a mixed-methods approach. The results of my quantitative research from the NoRedInk platform provided me with the data I needed to answer my first research question. The qualitative data that I gathered from student journal entries and the one-on-one interviews allowed me to draw conclusions about students’ attitudes towards grammar and the relationship between their attitudes and their performance on the digital platform. I was not able to answer my second research question with statistical tests because there was little variation in my students’ attitudes. Almost all of my students’ pre-existing attitudes towards grammar were negative. I was, however, able to use the data to procure my students’ input on using the digital platform.

I found that students’ attitudes about grammar instruction were varied, but they shared many common viewpoints.

ACKNOWLEDGMENTS

The writing of this dissertation could not have been possible without the patience, encouragement, and support of my friends, family, and fellow rhetoricians, and especially my committee members and major professor, Renee Hobbs. I am also indebted to my students for their candor, enthusiasm, and willingness to participate. I would like to thank Renee Hobbs for believing in me and challenging me, as well as for her unwavering zeal, inspiration, and priceless feedback. I am thankful for Bob Schwegler's encouragement and many lengthy discussions about grammar. I would like to thank Donna Hayden for her pivotal role in my success, with her open door and open arms, always available to listen, provide words of encouragement, and offer a shoulder to cry on. Michelle Caraccia, who I am forever indebted to for her unconditional concern and support; my walk across the stage would not have been possible without her. My fellow rhetoricians, especially Karen for her encouragement and example; and Jillian, for her contagious, positive morale, since our first project together in WRT 512. My colleagues at Three Rivers Community College, especially Joseph Selvaggio, for their camaraderie and support. To my sons, Austin and Jacob, who have helped me face the challenges that the past five years have presented. Jacob, although a young teenager during the time I researched and wrote my dissertation, for his daily pep talks, assuring me that I could do it and reiterating his belief in my ability to realize such a great feat. A very special thank you to David for his help, and to Michele and my other friends at Buckler-Johnson, whose constant encouragement kept me motivated over the past year. Lastly, I would like to express my gratitude to the Department of Writing and Rhetoric, and the Graduate School at the University of

Rhode Island for awarding me a TA-ship in 2015. I am appreciative of their generosity.

DEDICATION

This dissertation is dedicated to my father, George J. Malboeuf (1952-2010), who taught me that I could accomplish anything I put my mind to. His quote, “The depth of one’s knowledge is in direct correlation to one’s perseverance in digging,” took on new meaning for me as I began my journey towards earning my doctoral degree.

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CHAPTER 1

INTRODUCTION

“People who are experts in grammar don’t always write well, and many people who write well no longer think consciously about grammar ... but when something goes wrong in a sentence, a knowledge of grammar helps in recognizing the problem and provides a language for discussing it.” ~ H. Ramsey Fowler

“Over the years, grammar has probably generated more discussion, debate, acrimony, and maybe even fistfights than any other component of the English/language arts curriculum” (Tchudi, 1991). Despite the anti-grammar policy that has dominated the American English curriculum for forty years (Kolln & Hancock, 2005), models of language use must be provided to students in order to facilitate them in being able to identify effective style in language structure. Whether a language is considered standard or non-standard, there are conditions of correctness. In this chapter, I discuss my theoretical approach and the literature that I used as a foundation for this study. I review the literature on the teaching of grammar, the use of digital media in the writing composition classroom, and empirical research on the effect of teaching grammar on writing.

Research Questions

My study investigates the use of the digital grammar tool, NoRedInk, in a community college classroom. This exploratory research examines students’ attitudes towards using NoRedInk, and seeks to unveil a relationship between students’ attitudes towards grammar and their performance on the digital platform.

1. How do students experience NoRedInk in the context of a community college writing class?
2. Is there a relationship between students' attitudes towards grammar and their performance on the digital platform?

Statement of the Problem

Grammar instruction (Christensen, 1963, 1975; Mellon, 1969; O'Hare, 1975, 1976; Kolln, 1981, 1996; Delpit, 1997, 2006; Hartwell, 1985; Elbow, 1973, 1999; Blaauw-Hara, 2006; Shaughnessy, 1977) has long been a controversial subject. Many claims have been made that teaching grammar is ineffective and tedious (Braddock, Lloyd-Jones, & Schoer, 1963; Hillocks & Smith, 1986). However, many of these studies—Harris (1961) having the strongest influence—have been called into question. Kolln & Hancock (2005) end their article, "The Story of English Grammar in United States Schools," by summarizing the role of grammar in the teaching of writing. They state:

We would aim at a program embracing deep and wide knowledge of grammar as highly useful, perhaps proclaiming that ignorance of grammar is far more limiting than knowledge, that it creates a vacuum within which dysfunctional prescriptive norms are enforced. We would aim for a program that values home languages as the foundation for the evolution of a highly effective writing voice. What our students know already is much too deep to be taught, and we cannot afford to foster distrust. We need to get down to the business of helping them put that fine instrument to work in the creation of a range of effective texts, using a conscious understanding of language as an important adjunct in that process (p. 29).

A conscious understanding of language is important in creating texts for a specific audience, situation, and purpose.

I used the work of several prominent scholars (Hicks, 2002; Gilster, 1997) to support the use of digital tools in the writing classroom and the impact of digital tools on students' writing. Research (Grabill, 2015; Martin & Lambert, 2015; Balkun, 2011; Hobbs, 2010; DeVoss, 2010; Eidman-Aadahl, 2010; Hicks, 2009; Kirkland, 2009; McKee, 2007; Kress, 2003; Alvine, 2000) supports that digital technologies benefit student writing. Although many texts have been written about the use of new literacies in literacy instruction, I was hard pressed to find articles that were specifically written about using technology for grammar instruction. There is, however, research that shows the influence that educational games have had on learning outcomes in educational settings (Griffiths, 2002; Erhel & Jamet, 2013; Prensky, 2005).

I discuss the work of Freire and Bourdieu to expound the discrepancies in the educational attainment of people from different social classes. My intentions were to illustrate how people manipulate and are influenced by language. Freire addresses the profound significance of language, noting that the inability to communicate effectively is both a cause and effect of discriminatory power relationships. Bourdieu's theory focuses upon the fact that students must be taught the relationship between language and power because of the association between language, power, social practice, and access to social goods and services

Despite a century of research showing that traditional grammar instruction does not improve students' writing, recent national standards and high stakes tests directly address grammar. The Common Core English Language Arts/Literacy Standard states

that students must (1) demonstrate command of the conventions of standard English grammar and usage when writing or speaking; and (2) demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. A note on range and content states, “To build a foundation for college and career readiness in language, students must gain control over many conventions of standard English grammar, usage, and mechanics as well as learn other ways to use language to convey meaning effectively.” The SAT and ACT also expect students to demonstrate a command of the conventions of standard English grammar and usage. The current skepticism of grammar instruction culminated in 1963 with a report published by the National Council of Teachers of English (NCTE). The report, *Research in Written Composition* concluded that “the teaching of formal grammar has a negligible or, because it usually displaces some instruction and practice in actual composition, even a harmful effect on the improvement of writing” (Braddock et al, 1963). Within the next two decades, the National Council of Teachers of English (NCTE) published a resolution affirming the position that “the use of isolated grammar and usage exercises not supported by theory and research is a deterrent to the improvement of students' speaking and writing and that, in order to improve both of these, class time at all levels must be devoted to opportunities for meaningful listening, speaking, reading, and writing;” and that NCTE urge the discontinuance of testing practices that encourage the teaching of grammar rather than English language arts instruction (NCTE Position Statement, 1985). Today, there are still two contrasting schools of thought. Educators either trust that teaching grammar does not

help students or they believe that teaching grammar is necessary. The problem is not grammar instruction itself, but the teaching methodologies used.

I have read many masterpieces of obscurity, by numerous authorities from Quintilian to Crystal, on grammatical trends, vocabulary, and attitudes towards pronunciation. Without some preventative measures, I fear that grammar errors will become *acceptable* if enough people use them for a length of time. Some grammar rules must be prescriptive in order to preserve the English language from erosion. I am not insinuating that language should be static; change is inevitable. However, I wonder if there is merit in slowing down the change. It should be flexible, but not fluid. There have always been fundamental differences of opinion about which authority to follow, and the debate on grammar instruction will endure as long as people continue to communicate. Regardless of the causes, it is a reality that students are underprepared by traditional standards to achieve general education writing requirements in a college-level, semester course. Despite much aversion to traditional, rote grammar lessons, it is generally agreed that students should be taught acceptable usage as well as audience adaptation in order to write more effectively. Grammar, usage, and pronunciation have been, and often still are, a social determiner and the cause of bias. Whether right or wrong, we are perceived by the way we speak. It is a social belief that language use indicates one's intelligence. People judge others based upon their ability to use language. Delpit suggests that it is possible to teach surface features of academic discourse, which empowers students and allows them to gain entry into a world to which they were once denied access (2006).

I first became interested in grammar while in elementary school. I attended a parochial school until eighth grade and was taught mostly by nuns. I did not have a lay teacher until seventh grade. Grammar counted as much as posture. I looked up to my teachers and other people who had the ability to eloquently express themselves. Their fluency impressed me, and I longed to be able to converse in a similar fashion. Literature, like Shaw's *Pygmalion*, intrigued me. I began to understand the value and power of language, which I would later be exposed to through the works of Freire and Bourdieu. Like Eliza Doolittle, I grew up in a working class family as a member of a low-socioeconomic status community. However, without Professor Higgins to cultivate me, I viewed education as a way to escape from the community in which I grew up and gain access to the opportunities that a false dichotomy might hamper. I saw linguistic superfluity as the first step towards securing a successful future. Eventually, my chosen profession would also necessitate obtaining an advanced degree.

There is no doubt that there is a set of standard conventions everyone needs for formal writing and speaking, and certain basic grammar principles must be understood. My students demonstrate competency and intelligence, but many lack the experience in the kinds of speech and writing that is required of them at the college level. Students' writing has continuously been assessed, according to long-established criteria of grammatical, stylistic, and formal correctness. It is essential that students be taught the qualities of effective writing to empower them to improve their written work.

Overview of Methodology

The nature of my research questions lent itself to a mixed-methods approach. Qualitative research methods [observation, analysis of texts and documents, interviews, records and transcripts] were used to gather information. The results of the quantitative data from the NoRedInk platform was compared and contrasted to the qualitative data from student journal entries and one-on-one interviews. Using a qualitative approach in addition to a quantitative approach enhanced my study because it did not limit my students' input to a set of predetermined responses.

Participants and Setting

My sample for this study consisted of 17 students from two sections of College Composition that I taught in the Fall of 2016. My research took place at Three Rivers Community College in Norwich, CT.

Chapter Summaries

I used a seven-chapter format to present my dissertation. In Chapter 2, I discuss the literature on the controversial perspectives of teaching grammar; and the distinct camps, including old traditionalists, expressivism, cognitivism, and current-traditional rhetoric; the use of digital media in the classroom, and empirical research on the effect of teaching grammar on writing quality. In Chapter 3, the rationale and description of the methodology used is described. Chapter 4 presents the quantitative and qualitative findings of my study. In Chapter 5 and Chapter 6, I examine the study's five major findings: (1) In Chapter 5, I draw conclusions that integrate both quantitative and qualitative data to address my first research question: "How do students experience NoRedInk in a community college setting?" Chapter 6 addresses my second research question, exploring the relationship between students' attitudes

towards grammar and their performance on the digital platform. Although the data collected to address my second research question did not lend itself to be addressed through statistical tests, I was able to use the quantitative data to analyze their pre-existing attitudes about grammar and procure their input on using the platform. Chapter 7 is a synthesis which includes implications for future research and broader impact.

CHAPTER 2

REVIEW OF LITERATURE

The most common reason for teaching grammar has been to improve students' writing. In the field of composition and rhetoric, there is a lack of agreement on many issues surrounding the teaching of grammar. For decades, research has demonstrated that the teaching of grammar rarely accomplishes such an aim. Of course, there has been a lot of push back. Empirical research has shown that grammar cannot be taught. According to Hillocks and Smith (1991), "Research over a period of nearly 90 years has consistently shown that the teaching of school grammar has little or no effect on students." There is a lot of evidence saying that it does not help to improve students' writing, directly. That there is a trend in the literature that says direct instruction in grammar does not help students' writing, but there are reasons to teach grammar (Kolln, 1996). Rhetorical grammar enables such readings because it is "grammar in the service of rhetoric," which means that grammar is never divorced from ideological functions (Kolln, 1996). Didion also posits that grammar is a positioning tool, a way of framing and presenting ideas that influences how and what we see. This shaping of meaning through writing is intimately connected with a writer's grammatical choices" (1984). "Rhetorical grammar offers a perspective on the way people purposefully use language to describe problematic or possible new realities. It presents students with a framework and a vocabulary for examining how language affects and infects social

reality, as it also provides them with tools for creating effective discourse” (Micciche, 2004).

This dissertation is written with my fellow community college instructors in mind [possibly people who are teaching composition in this country who lack a thorough grounding in rhetoric and composition]. Because I am doing interdisciplinary work, I want to make transparent that my audience may likely be instructors who do not have a firm grasp of theories of composition and rhetoric or even an understanding of the politics of grammar instruction.

As you will see below, general consensus of research conducted in the 1960s and 70s is that studying traditional or transformational grammar does not improve writing ability. Although research has shown that rote grammar lessons do not improve students’ writing, grammar instruction may give students a vocabulary to talk about language as a symbolic tool for expression and communication. Therefore, I am interested in whether or not a digital grammar tool can help students gain flexibility in the use of language, and if this *rhetorical dexterity* may affect student attitudes towards grammar.

Rhetorical Grammar

Kolln and Hancock, who have reviewed the history of grammar instruction, note that educators have a negative attitude towards teaching grammar out of context. Rote exercises were shown to be the source of the students’ dissatisfaction, not the content. When the studies fail to separate content and method, grammar receives unwarranted condemnation. Martha Kolln’s advice was to avoid using what she calls “the unmodified grammar,” drawing on linguistics to offer guidance on how to establish

rhythm and emphasis (1996, p. 26). Since the statement in the 1963 NCTE report, what constitutes “formal grammar” has been questioned:

In view of the widespread agreement of research studies based upon many types of students and teachers, the conclusion can be stated in strong and unqualified terms: the teaching of formal grammar has a negligible or, because it usually displaces some instruction and practice in actual composition, even a harmful effect on the improvement of writing (pp. 37-38).

As Kolln points out, these conclusions, like many others about composition studies, “are crouched in tentative language” (1981, p. 140). There is no conclusive research on the effect of grammar instruction supporting the claim that grammar has no transfer value in developing composition skills. The NCTE report specifically states that “carefully conducted research which studies the effect of formal grammar on actual composition over an extended period of time” is rare (Braddock et. al., p. 37). Kolln does not advocate for the traditional “school grammar” disdained by O’Hare and Elbow. Kolln is an advocate for the non-traditional grammar that Christensen labeled “generative rhetoric.” Kolln asserts that exercises in sentence construction and combining help “student writers understand syntax, providing knowledge that gives them control of their writing” (1996, p. 29). This technique is more functional than formal. This conscious ability to “select effective structures for a given rhetorical context is what [Kolln] calls rhetorical grammar. [Kolln] uses the adjective rhetorical as a modifier to designate a method of teaching that is different from formal grammar” (1996, p. 29). Kolln attributes students’ writing deficiencies to lack of experience and detailed vocabulary. Instead of focusing upon error-avoidance,

she advocates grammar be taught as a tool that empowers students to make effective choices. Rhetorical grammar teaches students how to generate persuasive, clear thinking and reflects on and reacts to language as work, as produced rather than relinquished of imperfections (Micciche, 2004). Many scholars who have condemned sentence-combining pedagogies feared that it would hinder students' creativity. However, under careful review, the literature on the effectiveness of sentence-combining corroborates it as an extremely successful pedagogy. As Connors testifies, this is bogus. It seems "that the current perception that somehow sentence rhetorics don't work exists as a massive piece of wish-fulfillment" (Connors, 2000, p. 120). Many educators have erroneously been led to believe that sentence-combining was shown to be ineffectual.

Students should be taught to vary their style depending on context, topic, and audience. "Because all language communities privilege certain language over other, sociolinguists observe the values attached to particular language use, as well as to the language itself. Overt prestige refers to the positive values associated with the perceived 'better' way of language use in a particular community. For example, when college students write research papers for their classes they tend to use Standard American English (SAE) because, in American culture today, that's the language that educated individuals tend to use" (Amberg & Vause, 2009). The most influential individuals in a particular community are prone to use language with the most 'overt prestige.' Standard American English has not been named 'standard' because it is superior to other languages; it means "something that is widely used or accepted rather than a model by which to judge others. For example, when a builder talks about

standard ceiling height, he's referring to the most commonly used distance between the floor and the ceiling rather than the correct distance" (Amberg & Vause, 2009). Standard American English is the preferred model for use in public institutions, so in order to fit into the privileged discourse community of academia, students must utilize SAE. Standard American English tends to refer to the written rather than spoken form of American English, as it is not language that is naturally acquired. However, studying English and mastering the ability to use SAE does not have to be unpleasant. Students should be invited to appreciate their language and make discoveries, rather than associate its use with errors and penalties. "Too-rigid definitions of 'standard English' itself reject the usages of many educated and cultured speakers and writers" (Finegan, 1980). Because access to a higher position in society requires the ability to speak or write in a prestigious variety, teachers must facilitate improvement of students' language skills.

Disparities in composition theory and practice incite teachers to question the best way to develop students' writing abilities. "Our profession has not been well served by the anti-grammar policies based on dubious research and on distorted conclusions and inferences. The real harm has ensued because the negative findings have been applied to all of grammar, not just to traditional school grammar taught, as it so often is, in repetitive, prescriptive ways" (Kolln). Kolln adopted a rhetorical approach to grammar that encourages and connects writing and thinking; and describes grammar as "a rhetorical tool that all writers should understand and control" (1981, p. xi). According to Kolln, the conscious ability "to select effective structures for a given rhetorical context" is rhetorical grammar (1981, p. 25). She uses the adjective rhetorical as a

modifier to designate a method of teaching that is different from “formal grammar.” It is used to designate a purpose that is different from the remedial, error-avoidance or error-correction purpose of so many grammar lessons. She uses “rhetorical” as a modifier to identify grammar in the service of rhetoric. The rhetorical view, which is multifaceted, involves a commitment to judging writing by suitability of context; the situation and audience are taken into consideration (Fulkerson, 2005). If grammar is taught as a tool and students understand its usefulness, their writing will develop through their ability to make rhetorical choices. Kolln supports the appeal that grammar instruction should be a main focus of the composition curriculum. Students, who are native speakers of the language, subconsciously understand the system of language; if they are taught the necessary classifications and labels to understand this system, they will be able to reflect upon and talk about their language. Students gain independence as writers when they learn how to employ grammatical structures. Many undergraduate college students in the United States “may or may not have considerable error in their written work, but will almost certainly not have a metalanguage available to talk about that. Since the emphasis is on behavior (error avoidance) and not on knowledge, it is difficult to intervene and difficult to know who or what to blame for that situation” (Kolln & Hancock, 2005, p. 26). Students need to be taught to see a connection between formal choices and rhetorical effect. A rhetorical approach to grammar fosters students’ abilities as writers, speakers, and critical thinkers. Meaningful and engaging activities rather than rote grammar instruction will encourage students to acquire more complex communication skills. Delpit states, “Unlike unplanned oral language . . . writing is more amenable to rule

application—one may first write freely to get one’s thoughts down, and then edit to hone the message and apply specific spelling, syntactical, or punctuation rules” (1997, p.7). If students do not write with the fear that their writing is going to be judged but rather with the understanding that they will be constructively critiqued, they will be more apt to write freely and be more forthcoming. “Rhetorical grammar instruction is just as central to composition’s driving commitment to teach critical thinking and cultural critique as is reading rhetorically, understanding the significance of cultural difference, and engaging in community work through service-learning initiatives” (Micciche, 2004).

Evaluation of the teaching of freshman writing courses, for instance, had been a fundamental concern even before 1935 when the National Council of Teachers of English (NCTE) elected a committee to analyze the role of grammar instruction. This committee recommended a program called *An Experience Curriculum in English*. They suggested:

by no means a minimalist approach to grammar in context—nor did it emphasize the “teachable moment” for correcting errors. On the contrary, the Experience Curriculum set out a systematic program of study, with ten primary objectives to be introduced in Grades Two through Six, objectives having to do with sentence sense, with preventing fragments and run-ons, with providing sentence variety by means of compound predicates, adverbial and relative clauses. The program lists fifteen other primary objectives for Grades Seven through Twelve, including verbs, the concept of case, meanings of tenses, appositives—even the subjunctive mood (qtd. in Kolln & Hancock, 2005).

Empirical Research on the Impact of Teaching Grammar

Although many studies have sought to prove the ineffectiveness of grammar instruction, students must be familiar with grammar rules in order to clearly and effectually express themselves. Successfully teaching grammar rules therefore means also teaching the purpose of the rules. Teaching grammar through repetition and other rote drills is ineffective, as it ignores particular aspects of language change. Since the 1960s, many studies about traditional grammar instruction have been conducted. These studies have steadily revealed that traditional grammar instruction is not beneficial in facilitating students' improvement of their writing. "Traditional grammar instruction can help to perpetuate cultural prejudices regarding class and race that are mirrored in what is often referred to as the difference between 'correct' and 'incorrect' or between 'proper' and 'improper' language use" (Lindblom & Dunn, 2006, p. 71). "Communicative competence involves knowing how to use the grammar and vocabulary of the language to achieve communicative goals, and knowing how to do this in a socially appropriate way" (Zhang, 2009, p. 184). Non-native speakers, for example, who are adjusting to an academic audience may benefit from an awareness of the rhetorical strengths they possess. "They must be encouraged to understand the value of the code they already possess as well as to understand the power realities in this country" (Delpit, p. 581).

General consensus of research conducted in the 1960s and 1970s is that the study of traditional or transformational grammar does not improve writing ability. The English Review Group at the University of York, in association with the Evidence for Policy and Practice Information and Coordinating Centre (EEPI-Centre) undertook a

systematic review in 2004 to answer the question, ‘What is the effect of grammar teaching in English on 5 to 16-year-old’s accuracy and quality in written composition?’ This study, on whether the formal teaching of sentence grammar was effective in helping 5 to 16-year-olds to write better, concludes that the teaching of “grammar” and “syntax” has practically no effect on the writing skills of 5 to 16 year olds. “There is no high-quality evidence to counter the prevailing belief that the teaching of the principles underlying and informing word order or ‘syntax’ has virtually no influence on the writing quality or accuracy of 5 to 16 year olds” (Andrews et al., 2004, p. 47).

Previous research states that the teaching of formal grammar (and its derivatives) is ineffective; and the teaching of sentence combining is one (of probably a number of) method(s) that is effective. A recent critical review of the empirical evidence on the teaching of grammar provides an overview of research studies in English-speaking countries (Wyse, 2001). This review concluded that ‘the teaching of grammar (using a range of models) has negligible positive effects on improving secondary pupils’ writing’ (Wyse, 2001, p. 422). Elley et al. (1975, 1979) concluded that syntax teaching, whether traditional or transformational, has virtually no influence on the language growth of typical secondary students. The study, however, is not conclusive. The aim of this study was to “carry out a study of the effects of traditional and transformational grammar on children’s writing skills, and in so doing to avoid the deficiencies of previous research on the subject” (Elley et al., 1975). The investigation was a controlled trial conducted in a co-educational high school in Auckland, in the 1970s. Close to 250 pupils in “eight matched classes of average ability were taught,

observed and regularly assessed from the beginning of their third-form year ... to the latter part of their fifth-form year” (Elley et al., 1975). The experimental pupils “were classified into eight matched classes of 31 pupils” on the basis of a number of tests, and additional matching criteria were “ethnic group, sex, contributing school, and subject options” (Elley et al., 1975, p. 28). Although the students were allocated as individuals to the eight classes, the study—after this allocation—works as a cluster trial as the students in the eight classes were divided into 3, 3 and 2 classes. They were tested during the intervention period, and at the end. The three courses studied by the three groups were, essentially, a transformational grammar course; a reading-writing course, which substituted “extra reading and creative writing for the transformational grammar strand” (Elley et al., 1975, p. 29); and a traditional grammar course. Each ‘cluster’ of classes was taught one of these methods.

There were three participating English teachers. Their attitudes and skills could have an influence on the results, which presented the direct effects of traditional and transformational English grammar on children’s writing skills. The study was conducted over a three year period; all groups had approximately 574 periods of English during that time. Anonymous questionnaires were devised by the authors, and used at the end of each year, to assess the students’ attitudes towards instruction related to grammar. The results show “The effects of such grammar study are negligible. Similarly, those pupils who studied a course containing elements of traditional grammar showed no measurable benefits” (Elley et al., 1975, p. 18). This foundational study and others like it (Harris, 1962; Bateman & Zidonis, 1966; Mellon, 1969) provides useful information in evaluating textbooks, test development, and

survey construction. Research conducted on grammar instruction in the 20th century show similar results (Hillocks & Smith, 1991).

In an issue of *College Composition and Communication* (CCC), after years of disregard, Connors (2000) suggested that the efficacy of sentence-level rhetorics be re-assessed. Sentence-level pedagogy had historically been an important part of traditional writing courses. One of the most important sentence-based rhetorics was the generative rhetoric of Professor Francis Christensen, who in the early 1960s, wrote, “if a new grammar is to be brought to bear on composition, it must be brought to bear on the rhetoric of the sentence” (1963, p. 155). Christensen criticized traditional sentence theories, saying they were primarily taxonomic rather than generative or productive (Connors, 2000, p. 98). Christensen considered the sentence as a “natural and isolable unit,” and he affirmed that through mastering the ability to write good sentences, students would become good writers (Christensen, 1963). Christensen advocated for a rhetoric of the sentence that would “do more than combine the ideas of primer sentences ... one that would generate ideas” (1963, p. 155). Lester Faigley was the first to officially test Christensen’s syntactic rhetoric. Faigley (1963) found that writing produced through using Christensen’s program were measurably more mature, verifying that the Christensen method yielded measurable classroom results. These practices and other controlled imitation exercises actually resembled sentence combining. Sentence combining is a systematic way of teaching students to use more complex sentence patterns. Sentence combining was propagated by studies in transformational-generative grammar. The first major test of sentence

combining methodology was conducted by Frank O'Hare. It was popularized by researchers and teachers such as William Strong (1973).

O'Hare (1971) sought to measure the effect of written and oral sentence-combining exercises on the freewriting of a seventh grade experimental group. O'Hare replicated Mellon's experiment. O'Hare (1971) wanted to answer two questions: (1) would the experimental group write compositions in their free writing that could be described as syntactically more elaborate and mature, and (2) would they write compositions that would be considered better in overall quality?. The questions were successfully answered through the experiment; it was determined that sentence-combining practice had a favorable effect on the writing of the seventh graders who participated in the study. No study has uncovered a more statistically significant composition treatment effect than the sentence-combining practice (O'Hare, 1971). "Experienced in sentence manipulation and trained to think in rhetorical terms, they [students] would be in a better position to make meaningful rhetorical choices because they would have a wider repertoire of syntactic alternatives from which to choose" (O'Hare, 1971). Confidence also plays a part in the students' ability to manipulate syntax. When teachers highlight the positive aspects of students' writing, students develop confidence. Sentence combining accentuates student success because the practice models how to write. It is important for teachers to help students see the necessity of manipulating syntax. In 1977, Hake and Williams performed an experiment that compared imitation pedagogy and sentence-combining pedagogy. Hake and Williams concluded that certain students benefitted more from imitation than sentence-combining. Hake and Williams found that the students in their imitation

group learned to write better expository prose with fewer flaws and errors than students using sentence-combining pedagogies (1979, p. 143). This study prompted several questions about sentence construction and writing competence, including speculations about the significance of increased T-unit length: (1) Do writers at some high level of competence, who continue to mature, increase the length of their T-units? (2) Can we conclude that at some threshold of perception, shorter T-units are associated with higher quality? (Hake & Williams, 1985, p. 87). Sentence-combining, as a pedagogical tool, has spawned a large body of research. Hake and Williams insisted that further theoretical speculation could give sentence-combining a fixed place in the curriculum.

In a 1979 article, titled “NCTE Research Landmarks during the Past Twenty Years,” Stephen Koziol described sentence combining as “one of the most exciting instructional strategies to have emerged during the past decade” (p. 96). O’Hare’s study, in the early 1970s, triggered sentence-combining to be viewed as an effective process of improving students’ writing, showing that “Beyond a doubt, [sentence-combining] exercises without any grammar instruction at all could achieve important gains in syntactic maturity for students who used them” (Connors, 2000, p. 105). What is attractive about sentence-combining practices, for both student and teacher, is that it does not necessitate the study of grammar, traditional or transformational (O’Hare, 1971). Students who engaged in sentence combining for a sustained period of time were described as syntactically different and better in overall quality (Crowhurst, p. 63). Sentence-combining increases students’ control of language. Students must know how to employ their language. It is important that students are

taught how to use their language. The actual use that one makes of a skill is most beneficial (Postman, 1967). The definition of syntactic maturity is often debated. Concerns have been raised about whether or not it is quantifiable. Exercises pioneered by Kellogg Hunt (1965) brought sentence options to awareness.

The study, “Grammatical Structures Written at Three Grade Levels,” published by Kellogg Hunt examines the elements of writing, as well as the linguistic structures of the writing, that changed as people matured. In this study, Hunt used the transformational theory to measure syntactic maturity with accuracy. Hunt developed three well-known measures of syntactic development: words-per-T-unit, clauses-per-T-unit, and words-per-clause. After finding that sentence length was an inadequate index of maturity, Hunt invented the “minimal terminable unit” or “T-unit” (Hunt, 1965). John Mellon brought the studies of Bateman and Zidonis together with Hunt’s work in a study of combining kernel sentences.

In Research Report No. 10 (NCTE), Mellon outlines his one-year study designed to determine whether or not systematic programs in sentence-combining activities can beneficially accelerate the development of students’ syntactic maturity. Mellon observed the writing of 250 seventh grade students. Although the study follows in the tradition of prior research on the relation between the study of grammar and writing improvement, several features of the study differentiate it from earlier research. Mellon looked at the increased diversity of sentence structure, rather than on principles of correctness or error avoidance previously researched. Two previous studies appear to have tested the hypothesis that grammar extends the range of available sentence types (NCTE Research Report No. 10 7), but both studies were

largely error-centered. Error-oriented pedagogy was once again recognized to hinder students' writing development. In order to survey syntactic fluency, rather than frequency of errors, Mellon presented students with sentence-combining problems to be solved in connection with a study of transformational grammar (NCTE Research Report No. 10 22). The study determined that growth of syntactic fluency, as hypothesized, occurred as a result of this practice. Sentence combining was recognized as an essential tool in helping students write more mature sentences. Although the conclusion is not indefeasibly validated, nothing in the data suggests that the rationale is faulty (NCTE Research Report No. 10 71). A longer-term experiment would corroborate these results, as it remained uncertain if learning the transformational grammar or completing the exercises was responsible for the results. This uncertainty is what O'Hare had set out to determine through his 1970s research.

Within the curricular context of linguistic studies, the exercising of sentence combining as a practice activity has been found to be responsible for gains in student writing. Sentence-combining exercises have appeared in textbooks such as William Strong's *Sentence: Combining: A Composing Book* in 1973, which used "open" exercises; and O'Hare's own *Sentencecraft* of 1975 (Connors, 2000, p. 255). In William Strong's 1986 text, *Creative Approaches to Sentence Combining*, the potential of sentence combining is described. Strong asserts that the practice encompasses a variety of cognitive activities. The latter section of the text outlines various ways to use sentence combining in the classroom. Using practical exercises, teachers can stimulate their students' awareness of written language (Strong, 1986). Strong demonstrates how to introduce open exercises and create various types of

sentence combining using simple formatting conventions. When using sentence combining to build writing skills, Strong emphasizes that creativity and enthusiasm should be stressed over format and mechanical accuracy. The focus upon mechanical accuracy shifts to the logical expansion of ideas when teaching sentence combining skills.

In 1978, and again in 1983, Daiker and his colleagues at Miami University of Ohio hosted an entire conference dedicated to sentence combining (Connors, 2000, 256). After 1983, however, the study of sentence issues, including sentence-combining, ceased. Critics pointed out that sentence-combining exercises were essentially my exercises, context-stripped from what students really wanted to say themselves. Many teachers had come to distrust exercise based “drill and kill” assignments (Connors, 2000). Sentence-combining was criticized as being devoid of theory. This criticism was quantified in 1978, when James Kinneavy stated that “Few efforts have been made to place sentence-combining into a larger curricular framework,” and it still expected a philosophic rationale (60). The reasons sentence-combining was effective needed to be substantiated. In 1986, George Hillocks closely reviewed all the major sentence-combining research. He came to the conclusion that “Even with so many questions left unanswered, one is tempted to agree with Charles Cooper (1971) that no other single teaching approach has ever consistently been shown to have a beneficial effect on syntactic maturity and writing quality” (Hillocks, 731). Revealed in the papers he presented at the Conference on College Composition and Communication (CCCC) in 1990 and 1992, Morenberg blamed dichotomizing process/product thinking for the demise of sentence rhetorics (“Process/Schmocess:

Why Not Combine a Sentence or Two?” and “Come Back to the Text Ag'in, Huck Honey!”). Sentence-combining practices dissipated, despite generally solid evidence of its effectiveness from many research efforts in the 1970s and 80s (Saddler, 2007).

In 2007, ensuing from concerns about the inability of many high school graduates to write at the basic level required by college, *The Alliance for Excellent Education* published a report of the grant-making foundation, *Carnegie Corporation of New York*, on the writing proficiency of students in an effort to determine the consistency and strength of the effects of instructional practices on student writing quality. The report identified eleven valuable fundamentals of writing instruction, including sentence-combining, which is categorized as an alternative approach to grammar instruction (Graham & Perin, 2007). In the studies reviewed [for the *Writing Next* report], grammar instruction involved:

the explicit and systematic teaching of the parts of speech and structure of sentences. The meta-analysis found an effect for this type of instruction for students across the full range of ability, but surprisingly, this effect was negative. ... Such findings raise serious questions about some educators' enthusiasm for traditional grammar instruction as a focus of writing instruction for adolescents. ... Overall, the findings on grammar instruction suggest that, although teaching grammar is important, alternative procedures, such as sentence combining, are more effective than traditional approaches for improving the quality of students' writing (Graham & Perin, 2007, p. 21).

Because the number of students who need assistance with their writing and the fact that no single approach can possibly meet the needs of all students, activities to

maximize writing instruction must be combined in order to impact writing performance. Robert Connor's insight, acquired through his theoretical and critical interrogations of sentence-combining practices, needs to be revisited. It's time the "preterite phoenix" that Connors endorsed rise from the ashes. A resurrection of sentence pedagogies—which have been cyclical, but not widely adopted—is de rigueur. Since the sentence is such a central component of what students are asked to study and practice, it only makes sense that it be the nucleus of writing pedagogy (Connors, 2000, p. 97). The effect of sentence combining skills is dependent upon meeting students' diverse needs. Glenn Broadhead offers a series of classifications that are fundamental in teaching sentence composing skills. "Examples and models of sentence patterns in scientific, technical, and business areas" should be provided so that students can become more flexible and adaptable to a variety of writing situations (Broadhead, 1985, p. 34). Students will be fascinated to hear that "There might be 2,550 ways of arranging an independent clause and two free modifiers" (Broadhead, 1985, p. 45).

The number of imperative choices students have to make when generating a sentence can be baffling, especially to less-skilled writers. Exposing students to examples of sentences across a range of disciplines will help students generate effective sentences in a variety of contexts. Sentence combining should be integrated into the context of writing and the editing process. Although sentence-combining alone has not been proven to improve the overall quality of students' writing, it has shown to have a favorable effect on the complexity and efficacy of students' sentences. Sentence-combining gives students the skills needed to combine ideas and

show how they relate. Sentence-combining was abandoned because of people who were only concerned about error. Our concern should always be with larger rhetorical units, but it should be approached in a number of ways. There are four distinct approaches (Christensen; Mellon; Daiker et al.; Kolln) to teaching sentence-combining that extend beyond grammatical options to principles of style and literary value. Christensen's four principles of generative rhetoric are helpful in explaining sentence patterns. The concepts include: linearity, direction of modification, syntactic status, and semantic status.

Francis Christensen (1976) advocated for the "generative rhetoric of the sentence," which drew writing instructors to sentence combining. Christensen observed that "Grammar and rhetoric are complementary, but their procedures and goals are quite different. Grammar maps out the possible; rhetoric narrows down the possible to the desirable or effective" (Christensen, 1976, p. 572). Competence in both of these strategies is necessary. He identified the fact that composition cannot be taught without some conventions of style. Christensen looked at Hunt's study, and pointed out that "The long clause is not the mark of a mature style but an inept style" (1978, p. 576). Christensen sought to show that sentence-combining and generative rhetoric had a lot in common. Used together, these two complementary teaching methods can have great influence upon students' writing. In questioning whether or not the goal of schools is to teach a "mature" style, Christensen pointed out that a consensus on the features of a mature style was necessary. His grammar approach was based upon elements of both Hunt's and Mellon's studies, as he found limitations to using either in isolation. Hunt looked at sentence length, coining the term "T-unit,"

while Mellon supplied his students with simple transformational rules for combining sentences. The “radical flaw” that Christensen noted, in these developmental studies was interpreting the high frequency of free modifiers and “high frequency of structures of coordination” (Christensen & Christensen, 1978, p. 579). Another limitation to a full-blown transformational-grammar is that it “is complex, laden with impenetrable jargon, and hence excessively difficult for students (and teachers). ... the needs of a TG [transformational-generative] grammarian are different from ours. He is a linguistic scientist and needs a scholarly, comprehensive investigative tool: We need something less; a teachable, learnable, usable tool to help kids [sic] become more presentable and effective when they use language” (Fraser & Hodson, 1978, p. 52). Christensen feared that Mellon’s approach may lead to hard-to-read prose style.

Mellon did not see a connection between sentence-combining practice and the teaching of style. Mellon’s sentence-combining study was designed to determine, rather, whether or not practicing transformational sentence-combining would increase students’ syntactic ability. The students in Mellon’s study learned grammar per se; students needed to know, for example, the role of a subordinating conjunction. They studied transformational grammar incorporating sentence-combining practice. Mellon’s studies questioned the appropriate criteria for describing growth of syntactic fluency (1969). Mellon used Kellogg Hunt’s parameters of normal growth in syntactic fluency, to prove that systematic transformational sentence-combining exercises lead to faster progress towards mature sentence writing. Mellon advocated for creative activities to help students harness what they already know about language. Like Mellon’s exercises, those of Daiker, Kerek, and Morenberg (1978) supported

competence in language use as well as the concept of transformations (allowing the embedding of one sentence within another).

Other scholars were largely concerned with enhancing creativity through sentence-combining. In asking students [college freshmen] to combine ideas, Daiker et al. (1993) proved that there is a significant relationship between sentence-combining practice and syntactic growth (p. 39). Using William Strong's text, *Sentence Combining: A Composing Book*—supplemented by a series of sentence-combining exercises created by the investigators—the students in the experimental group in the Miami University study demonstrated syntactically more mature writing. Sentence-combining was utilized with college composition courses to show that sentence-combining practices should not be restricted to the lower grades (Daiker, 1993). Clear gains in overall writing quality were revealed. Through flexible techniques, sentence-combining helps students understand the unlimited creativity in syntactic form (Daiker, 1993). Making students aware of their competence to create a greater variety of sentences, their writing becomes more fluent. Students practice with sentence-combining exercises helps them develop the ability to visualize relationships between ideas, hence develop cohesive paragraphs. Good writing requires students to proficiently use rhetoric and possess knowledge of basic grammar.

Transforming Grammar Instruction

Despite much aversion to traditional, rote grammar lessons, it is generally agreed that students should learn the linguistic and rhetorical repertoires acceptable in a multiplicity of situations. Many scholars (Chomsky, 1957; O'Hare, 1971; Strong, 1986) claim that sentence combining will enhance students' writing skills. Studies

have shown that the study of grammar, alone, does not improve students' literacy skills. However, other instructional practices, such as sentence combining, have shown to have positive effects upon students' writing. Sentence-combining as a pedagogy enhances language development and has practical implications. Sentence-combining is implicit grammar instruction, not dependent upon formal knowledge of grammar, which emphasizes the control of grammatical structure. Sentence-combining is not separated from content and situation.

Many people mistakenly view grammar as repetitive, skill-drill practice or sentence diagramming. However, grammar instruction involving sentence combining teaches students how to communicate more effectually. Through language study, students' writing behavior is favorably changed. Mina Shaughnessy, a leading figure in the field of basic writing, articulates the complexities of English grammar. More than a systematic application of rules, Shaughnessy reminds us, "grammar involves a way of thinking, a style of inquiry," as opposed to "a way of being right" (1977, p. 129). Some arguments against the instruction of grammar assert that integrating grammar instruction would reduce instruction time spent on higher-order concerns. I contend that grammar instruction can assist students with higher-order concerns, including invention and arrangement. Robert Connors (2000) discusses reviving the practice of sentence-combining in the essay, "The Erasure of the Sentence."

Connors supports that sentence combining is an instructional practice that helps students understand and develop control over important grammatical structures while concurrently increasing their confidence with the writing process. By working with sentence combining, students can learn approaches that help them explore their own

topics, generate sentences, and make revisions to their text (Gebhardt, 1985, p. 202). Connor states that sentence combining improves linguistic performance by introducing students to sentence options, giving them opportunities to master more complex sentence patterns found in mature written discourse (2000). Sentence combining has the potential to help students become more fluent writers as they become aware of their competence in creating a greater variety of sentences. Since it became central in the 1950s, a lot of very strong research has been conducted on sentence-level pedagogy. Robert Connors's article, "The Erasure of the Sentence," is a key document in showing the great effectiveness of sentence-level pedagogies. It is one practice we know that students can carry from assignment-to-assignment. Sentence combining is more than lengthening sentences; it gives students the skills to recognize how words work together to form comprehensive ideas. It is an effective way to teach punctuation, parts of speech, clauses, and phrases. Sentence-combining practice, the most effective strategy of language study, helps students write better because of their exposure to a multiplicity of sentence possibilities. This pedagogical approach can be used with various levels of writers and types of texts.

Sentence combining pedagogies were practiced as early as the 1890s, but the theoretical base was not founded until Noam Chomsky's *Syntactic Structures* in 1957. Grammar took on new meaning; it was no longer limited to learning terms and labels. Chomsky's transformational grammar (TG) was proposed as a way to teach students how to take content and express it in more complex sentence patterns. Sentence combining derived from TG analysis. Sentence combining lessons vary, but the basic practice consists of joining short, simple sentences to make longer sentences using

embedding, deletion, subordination, and coordination (Connors, 2000, p. 103). Kernel sentences and explicit instruction is given in how to weld these kernel sentences into more diverse sentence types either by using connecting words to combine multiple sentences into one or by isolating key information from an otherwise superfluous sentence and embedding that important information into the base sentence (Saddler, 2005; Strong, 1986). First inspired by a literal interpretation of the linguistic theory, sentence combining was finally authenticated by Bateman and Zidonis.

The Bateman and Zidonis study had important implications for sentence combining. They found that students “must be taught a system that accounts for well-formed sentences before they can be expected to produce more of them” (Bateman & Zidonis, 1964). Kerek, Daiker, and Morenberg further asserted that “If children in a lower grade level intensively practice that skill which enables older—more ‘mature’—students to produce writing characteristic of their own level, then such practice will help accelerate the younger children’s maturation as writers” (de Beaugrande, 1985, p. 63). Using appropriately designed exercises can accelerate the structural elaboration of writer’s sentences. When the elements of students’ writing are changed by such practices, their writing becomes more effective. The maturity and quality of one’s writing are meaningfully dependent upon the relative syntactic complexity of the sentences. Complex sentences often lead to awkward phrases, resulting in sentence fragments and comma splices. Therefore, “we could choose to regard sentence combining not as a means for increasing sentence complexity, but as a means for controlling it” (de Beaugrande, 1985, p. 70). Through physically breaking apart and building sentences of their own, students will become mindful of syntactic variety,

consequently developing their writing skills. During the 1970s, composition study was briefly dominated by sentence level pedagogies (Connors, 2000, p. 96), but as decades elapsed it became a rumble of thunder in the distance.

“The ideas of the ruling class are in every epoch the ruling ideas: i.e., the class which is the ruling material force of society is at the same time its ruling intellectual force.”

~Karl Marx and Friedrich Engels

Language as Power

Rhetoric investigates how language is used to establish and preserve social groups, create meanings and identities, organize behavior, facilitate control, produce change, and generate understanding. As rhetoricians, the sociological thoughts of Freire and Bourdieu illustrate how people manipulate and are influenced by language. An analysis of the educational philosophy of Paulo Freire and Pierre Bourdieu's theories of pedagogic processes illustrate the discrepancies in the educational attainment of people from different social classes. French sociologist Pierre Bourdieu recognizes that power is not frequently exercised as explicit force. Power is altered into a symbolic form and given legitimate capabilities. 'Proper language' is converted into economic and social capital and becomes a source of prosperity, status, and power. Symbolic power, because it requires those subjected to it to believe in its validity, does not control passive groups. "In the struggle for imposition of the legitimate vision of the social world, in which science itself is inevitably involved, agents wield a power which is proportional to their symbolic capital, that is, to the recognition they receive from a group" (Bourdieu, 1991). This implies that the power exercised on others through language is preventable. Freire addresses the profound

significance of language, noting that the inability to communicate effectively is both a cause and effect of discriminatory power relationships. One may be compelled to silence, in fear of being viewed as ignorant. Language, as with education, should liberate students against oppressive social and economic systems. Just as speech permits a person to defend their rights, education is translated into wealth and power.

Linguistic capital is a subset of cultural capital contained in the appropriate facility of language. Linguistic capital is produced by linguistic competency. Language varieties that are respected by society can be perceived as linguistic capital; the ability to understand and use 'educated language' equates to capital. People with different circumstances tend to possess disproportionate amounts of linguistic capital. Bourdieu, as does Freire, recognizes that educated people hold a decided advantage over people who are not educated. Bourdieu associates linguistic capital to social class and habitus: "What expresses itself through the linguistic habitus is the whole class habitus of which it is one dimension" (Bourdieu, 1991). Language is used for a particular end, as a means of power. Social conditions influence the use of language. Power is a matter of social legitimacy that is culturally and symbolically created. It is continually endorsed through interaction between agency and structure. "The use of language depends on the social position of the speaker;" therefore, the authority of language "comes to language from outside" (Bourdieu, 1991). The focus of Bourdieu's theory is that students must be taught the relationship between language and power because of the association between language, power, social practice, and access to social goods and services.

There are many different methods of encouraging students to become critical members of their society, thus averting oppression. Critical thinking and communication are interconnected. A person's speech is employed and assessed in the context of social, political, and economic influences. The speech of low-socioeconomic status individuals may be assessed negatively. It may even be considered uneducated speech because it has come to signify low status. An individual's speech helps to determine their access to resources such as education and employment. Students must be enlightened to the fact that literacy can be empowering. The development of institutions enables different kinds of capital to be accumulated and differentially appropriated, while dispensing with the need for individuals to pursue strategies aimed directly at the domination of others: violence is, so to speak, built into the institution itself (Bourdieu, 1991). Certain knowledge and skills are necessary to achieve educational success. Educational institutions must be changed so students do not "become what they are," but rather transcend their social destinies (Bourdieu, 1991). If students are empowered to produce an infinite number of grammatically correct dialogues, for example, their speech will improve and they will be more socially competent. People undertake speech production with a certain expectancy of the projected reception of their words. A person's stylistic choices with regards to their speech are as important, if not more important than the content. "Since every language that makes itself heard by an entire group is an authorized language, invested with the authority of this group, it authorizes what it designates at the same time as it expresses it, drawing its legitimacy from the group over which it exercises its authority" (Bourdieu, 1991). Therefore, if a student's manners and style are more

eloquent, teachers may be influenced to reward them with better grades. This propensity is why people with upper-class backgrounds have an educational advantage. According to Bourdieu, educational institutions legitimate these class inequalities.

Because of the strong influence that linguistic characteristics have on academic success and employment opportunities, education should help students display competence via their language not hinder interaction. A person with high linguistic capital has more authority. “The competency adequate to produce sentences that are likely to be understood may be quite inadequate to produce sentences that are likely to be listened to, likely to be recognized as acceptable in all the situations in which there is occasion to speak. Here again, social acceptability is not reducible to mere grammaticality” (Bourdieu, 1991). A person must have the power to influence their listeners. Linguistic differences function as signs of social distinction, differentiating and privileging particular groups of people. Pedagogical approaches that promote student involvement rather than passive learning are necessary to resolve disparities.

The form of language, its grammar and syntax, and the function of language vary in different situations. In *Language and Symbolic Power*, Bourdieu states that “as soon as one treats language as an autonomous object, accepting the radical separation which Saussure made between internal and external linguistics, between the science of language and the science of the social uses of language, one is condemned to looking within words, for the power of words, that is, looking for it where it cannot be found (1991). Words provide individuals with power because they present the ability to make people comprehend and believe. Although the theories of Bourdieu and Freire

maintain their legitimacy, today, changing conditions make it necessary for educators to adjust their pedagogical approaches according to other theoretical considerations as well. Freire's theory is not as applicable to 21st century, conventional North American society, as it was to that of the revolutionary Brazilian society. However, it would behoove us all to apply portions of Freire's theory to our pedagogic practices. I do not see fit to adopt the entire revolutionary agenda. Freire's theory would not be as pertinent in our society because class differences are often indistinct.

The theories of Bourdieu tend to be abstract, but his delineation of the role of dominant language formation and the role literacy plays in constituting power cannot be discounted. Empowering diverse students means making individuals aware of the importance of linguistic competency. "It is clear that all the efforts to find, in the specifically linguistic logic of different forms of argumentation, rhetoric and style, the source of their symbolic efficacy are destined to fail as long as they do not establish the relationship between the properties of discourses, the properties of the person who pronounces them and the properties of the institution which authorizes him to pronounce them" (Bourdieu, 1991). The significant contributions of both Bourdieu and Freire are a bit idealistic. Moving closer to social justice and promoting substantive social change requires a concerted effort. We need to liberate not only our students, but the entire system through continually reinventing ourselves in a changing world. Academic credentials continue to correlate with social capital and remain an apparatus for widening the 'playing field' rather than amalgamating it.

Students, who are native speakers of the language, subconsciously understand the system of language; if they are taught the necessary classifications and labels to understand this system, they will be able to reflect upon and talk about their language.

Debates over what was the best English had already ensued by the 1600s. Today, more than 200 years later, grammar and proper speech are still equated to success. Although the publication of grammar books began in the late sixteenth century, it was the eighteenth century school grammars that have had the greatest audience and influence (Millward, 1996). In the eighteenth century, prescriptivist grammarians presented a rigid approach for determining what was to be considered both correct and incorrect in written and spoken language. Proper grammar, like etiquette, is required in particular social situations. The differences between the meaning of *grammar* and *usage* are often obscured. Grammar is a “capacity for language, a native ability to create and comprehend English utterances” (Lindemann & Anderson, 1987). Grammar is defined in many different ways. It also refers to several formal systems that linguists have created to analyze language. Traditional grammar, structural grammar, and generative-transformational grammar have all been important in the study of language. Alternatively, usage is “linguistic etiquette, to socially sanctioned styles of language appropriate to given situations and audiences” (Lindemann & Anderson, 1987). Proper usage signifies Standard English. However, several standards and varieties of English are regularly spoken. Students need to study writing in order to be shown the codes of power in language:

Students begin to understand how arbitrary language standards are, but also how politically charged they are. They compare various pieces written in

different styles, discuss the impact of different styles on the message by making translations and back translations across styles, and discuss the history, apparent purpose, and contextual appropriateness of each of the technical writing rules presented by their teacher. And they practice writing different forms to different audiences based on rules appropriate for each audience (Delpit, 2006).

This can be achieved through process-oriented rather than a skills-oriented writing instruction. Minority educators and students, especially, can be liberated by recognizing the “culture of power.” Explicitly teaching the rules of that culture, i.e. linguistic forms and communication strategies, will give marginalized students access to the power that accompanies it (Delpit, 2006). “The dilemma is not really in the debate over instructional methodology, but rather in communicating across cultures and addressing the more fundamental issue of power” (Delpit, 2006).

It is necessary to teach children linguistic skills so that they may switch in and out of Standard English. There are over 3,500 grammar ‘rules’ in English. Perhaps the prevalence of ‘rules’ is what makes the imposition of linguistic order such a challenge. This is further complicated by the fact that rules do not cover all cases and some rules contradict each other. One of the elements of the English language that makes it so magnificent is its changes and variations. Respectively, different usages are appropriate for different situations. Students should have knowledge of many potential language choices that they can adopt to suit different occasions. In the preface to Ralph Fasold and Roger Shuy’s *Teaching Standard English in the Inner City*, it is said that “the teacher’s job is not to eradicate playground English—or any other kind.

Instead, teachers should help children to make the switch comfortably from one setting to another” (1970, p. xi). Just as diversity must not be discounted, change cannot be stopped but must be managed. Appropriate and acceptable behaviors should be encouraged. “Appropriateness in language is the same as appropriateness in other walks of life. Take clothing. If you looked into your wardrobe and their only one suit of clothes, or one dress, how prepared would you feel to face the sartorial demands made upon you by society?” (Crystal, 2006, p. 102). No one would be happy if they only had one option for all types of occasions or functions. Just as one should not ignore a dress code, if people only have one variety of language to use, they will be ill-equipped. It is good practice for writing teachers to give students options when it comes to usage. Prior to 1875, a concept of the functional variety of usage had not yet been conveyed. It was not until the end of the nineteenth century that the disparity between SAE and the English promoted by school grammar was recognized. Many early grammarians failed to identify that various types of English could be considered *correct*, depending upon the situation. Teachers must instill, in students, knowledge of linguistic appropriateness and its pertinence in varying situations.

For many years, people have indicated that they are widely irritated by errors, and errors are wrong (Santa, 2008; Gray & Heuser, 2003; Beason, 2001; Anson, 2000; Connors, 1985; Hairston, 1981; Williams, 1981; Bartholomae, 1980; Shaughnessy, 1977). The controversy surrounding punctuation, mechanics, and especially grammar stems not from whether these skills should be taught, but the differences in opinion about how they should be taught. The word, “grammar,” also carries prescriptive connotations. The understanding of grammar in the field of rhetoric and composition

is different than the definition used in the field of linguistics. In “Grammar, Grammars, and the Teaching of Grammar” (1985), Patrick Hartwell provides insight on one of the reasons why the debate over the place of grammar instruction within composition persists. He provides five definitions of “grammar,” in an attempt to put an end to debates caused by people arguing for the inclusion of completely different concepts:

1. The “tacit and unconscious knowledge,” of language that a native speaker automatically acquires; a knowledge that is, however, influenced by literacy (p. 111).
2. Linguistic grammars, such as older structuralist, or more recent (at the time) generative transformational theoretical models, which attempt to explicitly represent Grammar 1 knowledge (p. 114).
3. Linguistic etiquette. “In more modern terms, ‘usage,’ or as Hartwell puts it, “shibboleths” (p. 110).
4. “The Incantations of the ‘Common School Grammars’” (p. 119). The flawed understandings of how the English language works often provided in traditional school handbooks: rules that are COIK: “clear only if know” (p. 119).
5. “Stylistic grammar.” The conscious control and manipulation of language in order to achieve a desired effect (p. 125).

Undoubtedly, grammatical rules are important for the mastery of language.

However, it is essentially agreed that an alternative to traditional grammar instruction

must be practiced. Traditional school grammar has consistently been a concern of linguists because it gives the impression that certain varieties of English are bad, and it fails to teach students the differences between SAE and other varieties without making the former appear inferior. Webbe was one of the earliest to question grammar instruction, but certainly not the last. “Grammar is not an end in itself, and cannot of itself make us speak correctly” (Webbe as cited in Watson, 1911, p. 42). Nonetheless, today, many acknowledge that the avoidance of error in writing and as a goal of instruction is significant.

It is a reality that students are underprepared by traditional standards to achieve general education writing requirements in a college-level, semester course. A plethora of research (Greene & Forster, 2003; Education Commission of the United States, 2008) indicates that there is a significant concern for students’ writing and that it is in need of improvement. In order for students to learn grammar and apply what they learn about grammar, teachers need to alter how they think about and teach grammar. A knowledge of technical grammar correlates to the ability to use English and to interpret language (Hoyt, 1905). The teaching of grammar is important because it promotes an active involvement with language and encourages critical thinking. “In addition to the ability to engage with, shape, and develop ideas productively in their writing, our students need to be able to adhere to standard written English to succeed in their other classes and to get jobs at the end of their schooling, and it’s the responsibility of writing teachers to help them do so” (Blaauw-Hara, 2006, p.165). This positive change in grammar instruction is a descriptive one.

Digital Literacy

In the field of composition and rhetoric, work has been done on digital literacy and incorporating the use of technology in the composition classroom (Grabill & Hicks, 2005; Lankshear & Knobel, 2003; New London Group, 1996; Gilster, 1997;). However, there is a lack of research into the use of digital platforms as an alternative to traditional grammar instruction.

Cornell University (2009) defines digital literacy as “the ability to find, evaluate, utilize, share, and create content using information technologies and the Internet.” Twenty-first century literacy is defined as “the set of abilities and skills where aural, visual, and digital literacy overlap. These include the ability to understand the power of images and sounds, to recognize and use that power, to manipulate and transform digital media, to distribute them pervasively, and to easily adapt them to new forms” (The New Media Consortium, 2005, p. 2). It is not sufficient for a student to be able to ‘operate’ tools like computers and mobile phones, but *also* have the ability to adapt the affordances and constraints of these tools to particular circumstances (Anderson & Mims, 2014).

It is important that students be able to perform tasks correctly in a digital environment. The use of “both print and non-print communication forms in the classroom must replace competition between them as literacy educators begin to explore new ways of using the expanded multimedia environment to enrich the lives of children and youth” (Neuman, 1995, as cited in Hobbs & Frost, 2003, p. 334). Lexical and grammar skills are linked to literacy. Before students can fully engage in textual literacy, they must be able to read and write. Literacy professionals and the

organizations that represent them need to commit to understanding the complex relationship between literacy and technology (Selfe, 1999, p. 160). New media literacies include traditional literacy, as well as digital literacies. Hicks and Turner (2013) suggest, “English teachers must embrace a new role: We must advocate for digital literacy, not just technology, in a way that reconceptualizes our discipline. We must dump the dittos, throw out the workbooks, and remix our teaching for a digital age” (p. 61). Gee (1999) notes that, “each social language has its own distinctive grammar . . . That is, we speakers and writers design our oral patterns or written utterances to have patterns in them by virtue of which interpreters can attribute situated identities and specific activities to us and our utterances” (p. 29). The desire to validate students’ own language varieties and the need to teach them the standard language leaves teachers feeling torn between models that promote rescinding grammar instruction completely and models that embrace an acute awareness of grammar. Grammar does have a place in the English language arts curriculum, not in isolation, but as a disciplined study of language. It must be acknowledged that teaching writing is much more than correcting mistakes, nevertheless certain standards must be achieved. Language will continue to evolve. It is almost impossible to predict the future of English language instruction because technological developments will also continue to affect the way language is studied.

The research and evaluation findings of the Center for Applied Research in Educational Technology (CARET) emphasize the influence that technology has on student achievement. This impact is most significant when technology is integrated into the curriculum. “Certainly, technology has been an impetus for constant change,

and in the context of online writing pedagogies, this change has impacted not only the spaces in which we teach writing as a process but also the increasingly diverse students we serve” (Blair, 2015, p. 472). The challenge is that “to be literate, students must have a familiarity with the full range of communicative tools, modes (oral and written), and media, plus an awareness of and a sensitivity to the power and importance of representation of self and others, along with the space and support to communicate critically, aesthetically, lovingly, and agentively” (Hull, 2006, p. 230). The goal of composition instruction is to teach students to communicate effectively. “Ever since Plato, that role has involved teaching children to use the most powerful tools available. For centuries, the most powerful tool has been print” (Rose & Meyer, 1994, p. 294). Today, and for the coming centuries, the ability to use varied media will expand student’s learning opportunities and provide them with what they will need to thrive in our increasingly digital world.

Since the term “digital literacy” was coined by Paul Gilster, students have been encouraged—more than ever before—to keep up with the rapid evolution of writing (1997). Students must have an expanding set of communicative skills, and composition instruction must encompass the use of varied media. Emerging research (Whitehead & Wesch, 2012; Long, 2008; Hull, 2006; McHaney, 2011) verifies that the learning style of millennials is very different from that of twentieth century learners (Arms, 2012). Hobbs argues that digital and media literacy competencies ... constitute core competencies of citizenship in the digital age” (2010, p. viii). Digital technologies should be harnessed to improve instruction and enhance student learning because technology offers rich learning opportunities. Technology can make learning

easier, more efficient, and more motivating. Hicks states, “We have the opportunity to help this generation define itself on its own terms. The question is no longer whether or not we should use technology to teach writing; instead we must focus on the many ways that we can use technology to teach writing” (2013). The National Writing Project’s (NWP) website, *Digital Is*, invites all educators to share work, reflections, and practices. This nationwide network of educators works together to improve the teaching of writing in today’s increasingly digital and interconnected world. The many ways in which digital technologies benefit student writing can be seen in the research of many prominent scholars (Grabill, 2015; Martin & Lambert, 2015; Balkun, 2011; Hobbs, 2010; DeVoss, 2010; Eidman-Aadahl, 2010; Hicks, 2009; Kirkland, 2009; McKee, 2007; Kress, 2003; Alvine, 2000). Digital technologies provide immediate assessment and engaging curriculum, and foster personalized, flexible learning. There are, however, unique challenges to teaching writing in the digital age. The impact of digital tools on student writing has raised some concerns. A survey of Advanced Placement (AP) and NWP teachers captured concerns about diminishing grammatical skills and vocabulary, an increasingly blurry line between formal and informal writing, and a general emphasis on short forms of expression (Purcell et al., 2013).

“There is not a writer in our classrooms today who will not be producing something with a digital writing tool in her or his lifetime.” ~ Troy Hicks

Use of Digital Tools for Writing Instruction

Blogs, Wikis, text messaging, digital gaming, and applications software have all become an integral part of students’ community and personal literacies. In recent

years, the number of technology-based writing tools has been growing rapidly. Digital tools are inextricably woven into their [students'] everyday culture and literacy practices (Anderson & Mims, 2014). Integrating technologies into the classroom in support of teaching and learning has the potential to motivate students and connect with their interests and experiences. It can also enhance key components of effective writing instruction (Graves, 1983). As writing instructors, we should capitalize on the technologies available to the current generation of writers. Just as we are rethinking and rewriting curriculum because of the potentials of new technologies, we should also be rethinking *how* we teach or approach the content of our classes—incorporating new technological tools and affordances of digital media. The interactivity of the web has “changed the way readers and writers relate, with readers moving from the position of passive recipients of information to active collaborators in the process of knowledge creation” (Jones & Hafner et al., 2012, p. 47).

Many books have been written to encourage teachers to reconsider how to teach writing in the digital age (Hicks, 2009; National Writing Project, DeVoss, Eidman-Aadahl, & Hicks, 2010). Although many texts have been written about the use of new literacies in literacy instruction, I was hard pressed to find articles that were specifically written about using technology for grammar instruction. There is, however, research that shows the influence that educational games have had on learning outcomes in educational settings (Griffiths, 2002; Erhel & Jamet, 2013; Prensky, 2005). Research says that the formal features of electronic game playing, such as their goal-directed nature and immediate feedback, service as incentives to motivate players (Prensky, 2005). In addition to incorporating goal-directed activities,

games also provide reinforcement, maintain records of behavioral change, and provide feedback (Griffiths, 2002). Feedback provides an assessment of progress by motivating a performer to put more effort, stay focused, and strive to progress toward goals to attain the task (Garris et al., 2002).

NoRedInk: Teacher-Created Writing App

Silicon Valley entrepreneurs have developed tools to help people master the art of good grammar. In February of 2012, Jeff Scheur, a former English teacher, launched the first version of NoRedInk, an online tool used for teaching grammar, usage, mechanics, and style. It is an adaptive online application that lets students practice their grammar and punctuation skills using online drills that are tailored to their personal interests. Upon creating an account on the NoRedInk platform, students customize their dashboard by selecting what most interests them, anything from favorite television shows, movies, or books to celebrities, musicians, and athletes. NoRedInk generates questions specific to student interests. Students access NoRedInk through their personal learning dashboard where they will find assignments from their teacher. The dashboard also gives students opportunities to work independently; they can choose to work through hundreds of activities that they can select from any of the available pathways. The majority of NoRedInk's offerings are free to users; however, the company does offer access to upgraded features through a paid subscription to NoRedInk Premium (EdSurge).

Scheur created NoRedInk to generate a better feedback loop in order to help his students become stronger writers. He feels that motivating students to learn grammar is very important. "The reason that students struggle so much with skills in grammar

and style is the wide gap between students writing a paper and the multiple choice way that they're assessed" (NoRedInk CEO and founder Jeff Scheur). In September of its first year, NoRedInk was the winner of the \$75,000 Citi Innovation Challenge at Education Nation. Free content on NoRedInk includes diagnostic testing features to determine student strengths and deficiencies; adaptive learning technology that adjusts to a student's correct and incorrect responses; immediate feedback for students; and auto-grading for all assignments. The NoRedInk platform gives immediate feedback and encourages students to repeat modules until they achieve proficiency. Most digital tools assess a student's knowledge through multiple choice questions. Conversely, NoRedInk provides high interest content with authentic assessments that adapts as students interact with the technology. Teachers can track progress to see exactly which concepts are giving students trouble. Tracking students' progress in real time allows for the creation of customized assignments to assess specific grammar skills. Assignments are graded instantly and students receive feedback as soon as they are done. Teachers can analyze growth over time, identifying at risk learners and getting up to the moment status reports for each student. NoRedInk builds stronger writers through interest-based curriculum, adaptive exercises, and actionable data.

NoRedInk empowers students to take ownership over their learning by identifying strengths and areas of need as they work to master individual skills. Because NoRedInk affords students the opportunity to select their interests, all of the work is personalized and relevant. The site is mastery based, so when I assign my students practice, they work to master each skill in a learning pathway, that adapts to each student's needs as they go. When a student answers a question incorrectly, they

are given a hint; another incorrect answer will give them a breakdown of their mistake—without all the red markings! Students are shown a model of how to build a similar sentence, and then the program generates a new sentence with the same structure to apply what they were just refreshed on. Students practice until they understand the concept.

There are five types of assignments that can be assigned to students on the NoRedInk platform: planning diagnostics, unit diagnostics, practice, new quizzes, and growth quizzes. The planning diagnostics give a broad overview of how students are performing. Unit diagnostics allow for a more zoomed in view of how students are doing on a specific skill. I assigned two unit diagnostics, one at the beginning of the semester and one at the end of the semester. The initial diagnostic gave me a sense of my students' strengths and weaknesses. I was able to get a sense of what my students already knew; these diagnostics helped me to figure out what areas might be most challenging for students. The concepts that I chose to assess came from cross-referencing the error lists that I discuss, in detail, in Chapter 3. I assigned several quizzes throughout the semester to assess my students on a specific set of skills. I also created growth quizzes to match previous quizzes and unit diagnostics in order to assess the same concepts using different questions. I used these summative assessments to get a sense of my students' growth over time (over the course of a sixteen-week semester). Students were also given the opportunity to master skills at their own pace through the practice assignments.

According to Jones and Hafner, “The most conspicuous affordance of digital media is interactivity” (2012, p. 68). The affordances of digital media have resulted in

writing that continues to become more visual. In “Games, Learning and Literacy,” Subrahmanyam and Renukarya (2015) discuss the four potential pathways of digital game influence: time, formal features, content, and context of use (p. 139). After looking at the time spent with games in educational settings, the authors identify how formal features of games can influence and mediate learning. Although NoRedInk is not a game, it has similar attributes. Formal features such as goal-directed activities and immediate feedback are proven to influence learning. Research on the content of digital games is sparse, but informational studies (Tran & Subrahmanyam, 2013) show some benefits. The fourth pathway discussed in the article is the social context of use. Collaboration and competition over computer games yield benefits through enhancements to student motivation. Subrahmanyam and Renukarya (2015) suggest looking at video games as learning experiences because of their potential to mediate learning. The research on how game use mediates learning will become increasingly important as technology becomes more integrated in the lives of digital youth. Before the creation of NoRedInk, games in the composition classroom at the college level were limited to Grammar Bytes!, or Capitol Community College’s “Guide to Grammar and Writing.” Both of these websites provide students with opportunities to practice grammar. However, they are limited to multiple choice quizzes and short explanations.

NoRedInk requires users to construe rules and make decisions, and it is personalized to users’ interests. Like an online game, NoRedInk is experiential and active. Gee (2003) suggests, “the best (most popular) games are usually difficult and complicated to learn, so if video game designers want to make money, they have to

somehow make learning how to play their games fun...this necessity has turned video game designers into expert teachers and motivators” (qtd. in Jones & Hafner, 2012, p. 140). Student’s level of competence is tested and pressed when gaming. Students are not just thinking; they are experiencing something first-hand. Therefore, students feel as though they are “an active agent in the game, playing an active role in co-creating the game world” (Jones et.al., p. 140). Directions and explanations are offered gently and in non-threatening ways. The lessons and practice on NoRedInk allow students to practice skills without the fear of consequences for making mistakes. Gee contrasts the learning in video games with learning in formal school-based contexts:

Learning video games is always situated in experience of the game world:

information is provided ‘just-in-time’ when it is needed to solve a problem in the game. In contrast, much of the learning that children do in schools is abstract and decontextualized (as qtd. in Rogers, p. 141).

Similar to the potential of the medium of video games to provide a space for new literacy practices, online applications, like NoRedInk, open up new ways for students to be active recipients of information and to make meaning by drawing on the affordances of digital media (Rogers). Reading and writing through digital media are interactive processes. Digital media engages students. “Injecting digital technologies into the classroom necessarily affects our relationship with every other communications technology, changing how we feel about what can or should be done with pencils and paper, chalk and blackboard, books, films, and recordings” (Jenkins, 2006, p. 8).

New kinds of literacies are also becoming necessary for today's jobs. The increased development and adoption of digital technologies has changed the literacy practices that students must engage, in order to prepare them for the modern workplace. Digital literacy is necessary for today's jobs. Jobs require digital literacy in the use of media to present, record, and analyze data. "Ninety-six percent of working Americans use new communications technologies as part of their daily life, while sixty-two percent of working Americans use the Internet as an integral part of their jobs" (Pew Internet and American Life Project, 2008). Technology has changed the way today's students process information, so instructors must shift their pedagogy when teaching these digital natives. With the increased use of technology over the past decade, educators are enhancing traditional instruction with digital literacy to make learning more meaningful for students and to use their passions to motivate them to learn (Prensky, 2010).

Since its creation in 2012, NoRedInk has earned the label, "viral sensation." Ten percent of the United States' school system was using the site by December 2013, and by March of 2016, students had answered over one billion questions. In 2015, NoRedInk raised \$6 million in Series A investment led by True Ventures.

Starting in the 2015-2016 school year, NoRedInk [which is San Francisco-based] partnered with the Northwest Evaluation Association (NWEA) to offer adaptive feedback helping students improve on the Measures of Academic Progress (MAP) test, a language usage assessment. Thirty-six percent of students in the study improved by more than two grade levels.

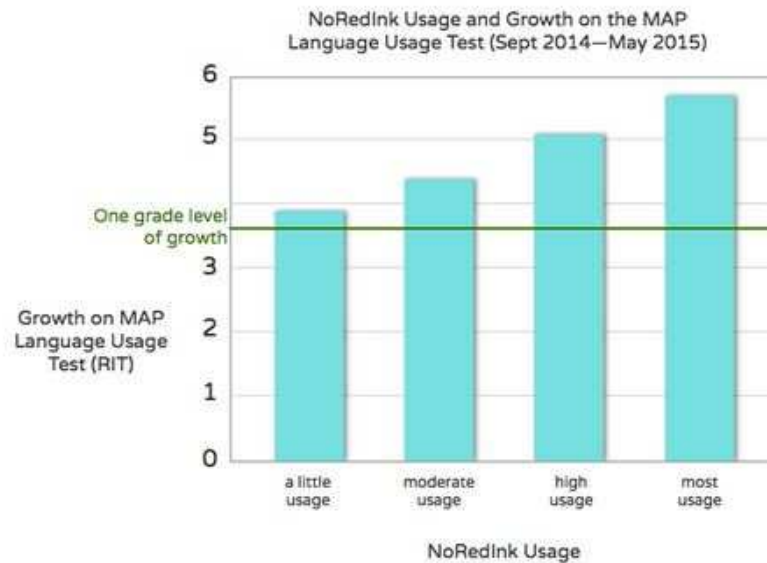


Figure 1. NoRedInk usage and growth on the Measures of Academic Progress (MAP) usage test (September 2014-May 2015).

Part of NoRedInk's success can be attributed to the importance of grammar and writing to the Common Core and high-stakes standardized tests. According to the United States Department of Education, 73% of students in the U.S. are below “proficient” in writing. On both the ACT and SAT, students have scored lower in grammar and writing than on any other section—for nearly a decade (*NoRedInk*).

In order to advance new knowledge in the field that may also inform my own teaching skills, I researched the use of the digital grammar tool, NoRedInk, in a community college classroom. This exploratory research examines students’ attitudes towards using NoRedInk. The following questions guided my research:

1. How do students experience NoRedInk in the context of a community college writing class?
2. Is there a relationship between students’ attitudes towards grammar and their performance on the digital platform?

CHAPTER 3

NOREDINK

NoRedInk, a teacher-created, web-based learning platform (and Chrome app) that helps students improve grammar and writing skills, offers high interest content, adaptive learning, practice exercises, quizzes, and assignments; and progress-tracking features. It generates quizzes based on student interests and skill needs. It is an online tool used for teaching grammar, usage, mechanics, and style. Teachers can assign a variety of diagnostic and instructional materials; students may also choose to work independently through the hundreds of activities on NoRedInk. The product allows for differentiated targeted intervention in grammar in a way that is engaging for students. Students can get the help to fill in writing gaps that they need without being dragged through things they already know. They can also work at their own pace. Teachers can see this data and use it to measure student progress and learning. The majority of NoRedInk's offerings are free to users; however, the company does offer access to upgraded features through a paid subscription to NoRedInk Premium. Free content includes:

- diagnostic testing features to determine student strengths and deficiencies
- adaptive learning technology that adjusts to student correct and incorrect responses
- immediate feedback for students

- auto-grading for all assignments

Additionally, NoRedInk provides all users with numerous resources for onboarding including parent letters, implementation guidelines, and video tutorials (EdSurge). I interviewed Ned Lindau, Head of Partnerships at NoRedInk; we discussed the adaptive curriculum and updates to the platform.

Signing Up for an Account on NoRedInk

Signing up for an account is simple. When a student enters the site for the first time, they click Sign Up. From there they will select they are a student, and they will be prompted to enter a class code which their teacher will have provided.



Figure 2. Screenshot from the NoRedInk platform showing how to create a new account.



Figure 3. Screenshot from the NoRedInk platform showing the class code.

Students can choose to sign up with Google or Clever, which allows students to do a single sign on. This is a nice feature, as students will not have to remember an additional password. From there, students select their grade.

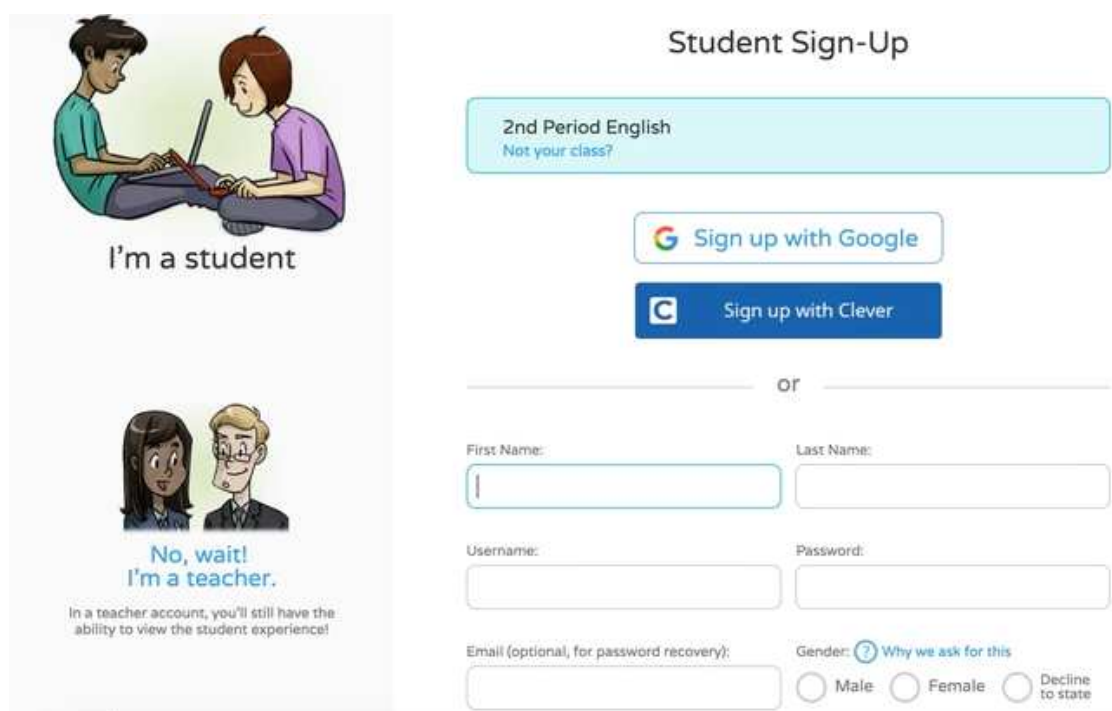


Figure 4. Screenshot from the NoRedInk platform showing student sign-up.

Next, the site asks students to select their interests. NoRedInk does this because they know that “teaching and learning grammar has not always been the most engaging or

exciting topic. Students often have fun choosing interests that make the learning more relevant to them” (Lindau). Students can choose from favorite television shows or movies, actors and actresses, musicians, celebrities, athletes, and they can even add their own friends and pets’ names.

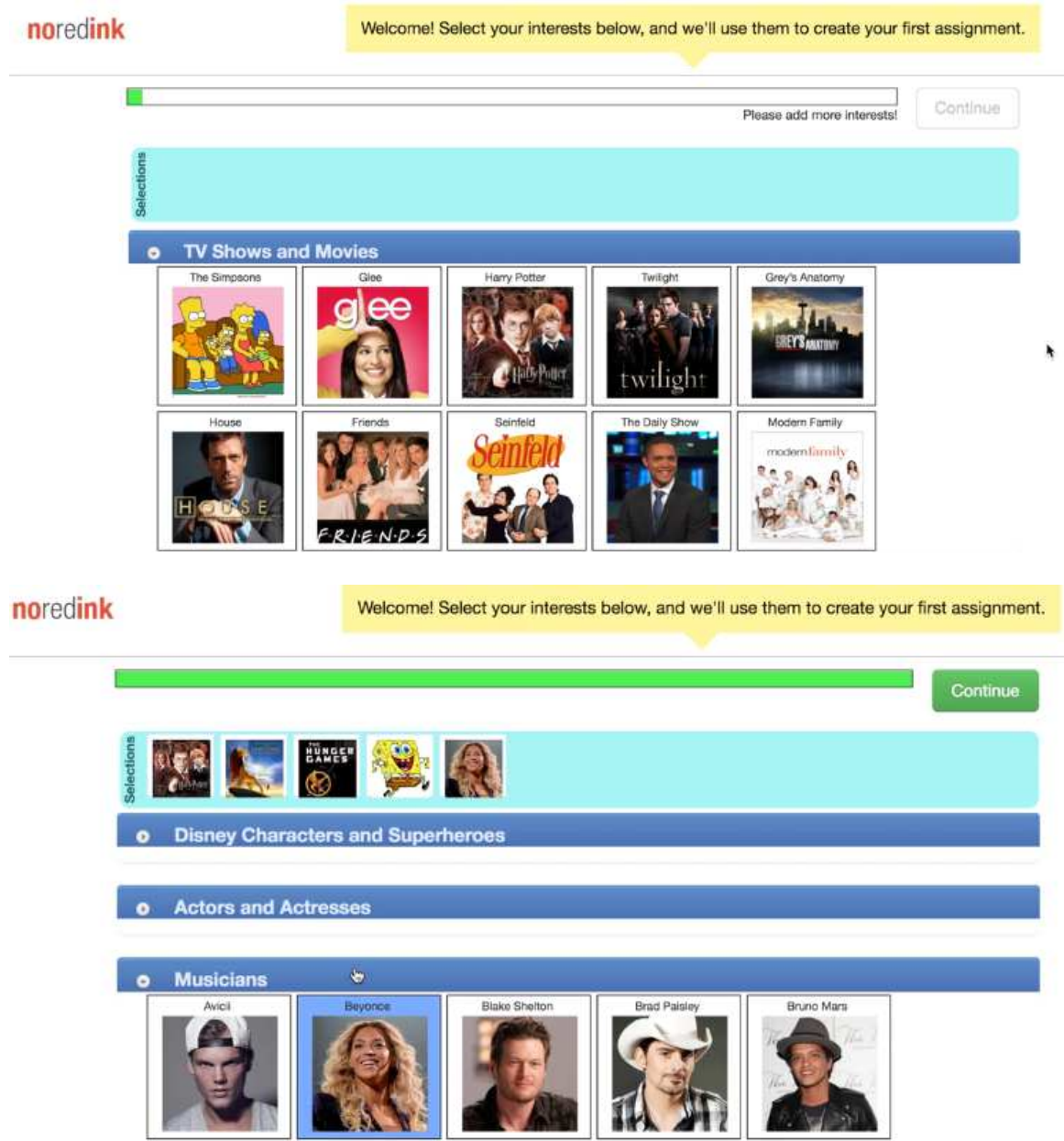


Figure 5. Screenshot from the NoRedInk platform showing the pop culture element.

After these selections, students click “continue,” and are taken to the home page. Here, a student can see the number of topics they have mastered and their practice and quiz averages. They can also see assignments that their teachers have given them to work on.

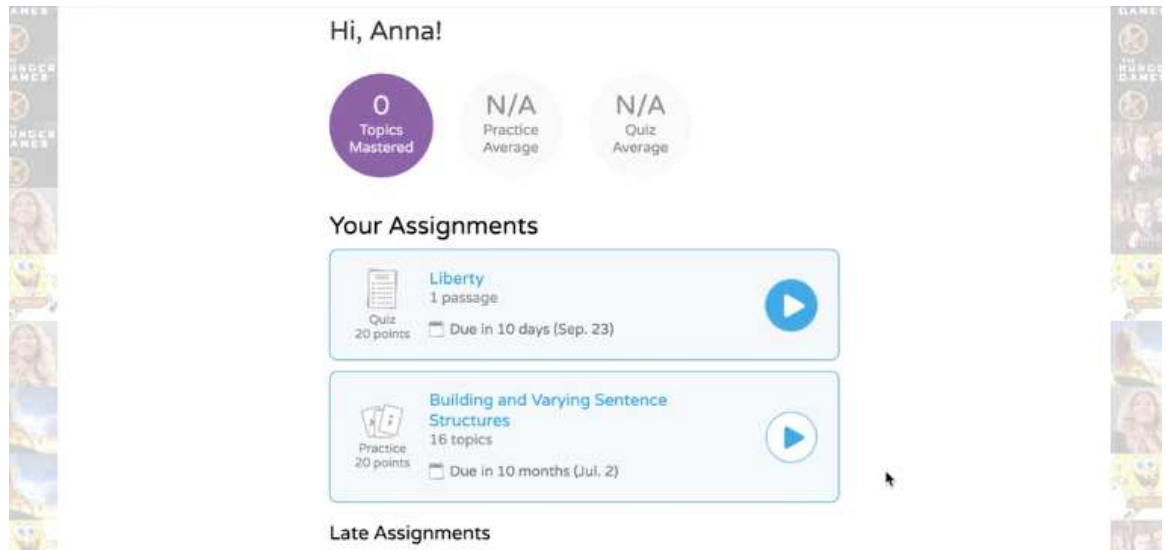


Figure 6 . Screenshot from the NoRedInk platform showing assignments.

Assignments on NoRedInk

Teachers can assign a variety of assignments. They can give diagnostics that show students’ strengths and weaknesses across multiple concepts. Teachers can give pre- and post-tests which measure proficiency and track growth; and they can assign practice. The lesson page hosts all of the pathways on the site and a lesson for every topic. The lessons can be saved to the desktop or projected to students. These can be used for pre-teaching or supplementary support for students. Students can track their results and choose learning pathways from which to practice. When a student clicks on “practice,” they are taken to a learning pathway. A learning pathway is a student-

friendly scope and sequence that takes a relatively complex concept such as “building and varying sentence structures” and breaks it down into its component parts.

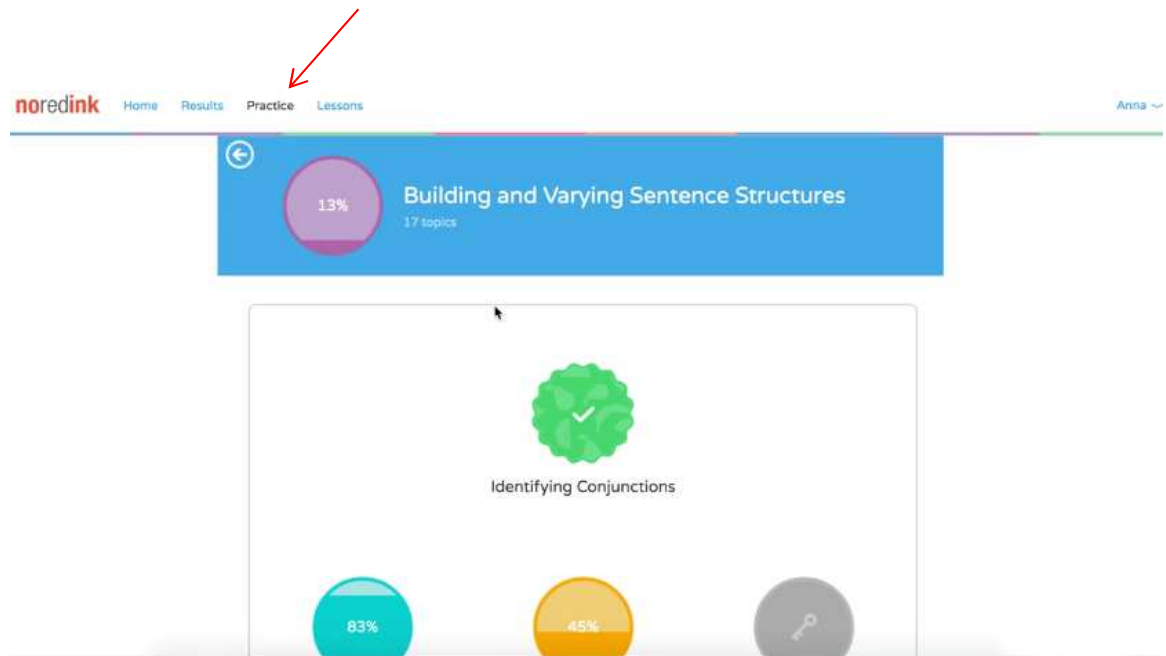


Figure 7. Screenshot from the NoRedInk platform showing practice for building and varying sentence structures.

Students start by mastering the most basic application of a skill, and along the way they unlock successive steps and more challenging concepts as they learn throughout a pathway. There is also a checkpoint that serves a dual purpose. The first is to check for understanding of the concepts prior to it, and the second is to allow students who feel confident on the prior concepts to go ahead and “place out” by showing that they are aware and they understand all of the concepts above.

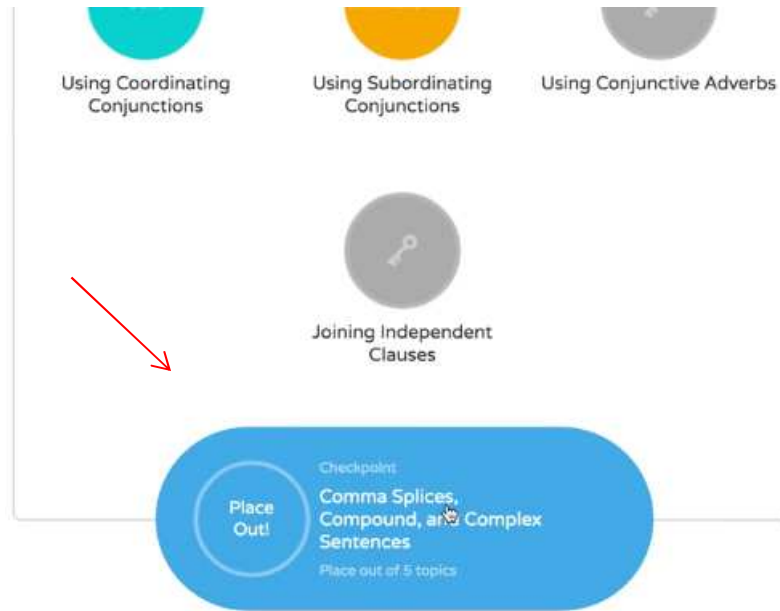


Figure 8. The option of placing out of topics.

Right away, it is noticeable that NoRedInk is more interactive than a grammar worksheet or multiple choice quizzes. Students manipulate sentences by clicking on punctuation to change it; they can pick it up and drag it around the sentence, drop it off the screen to get rid of it or drag it back in. They can also capitalize and uncapitalize letters.

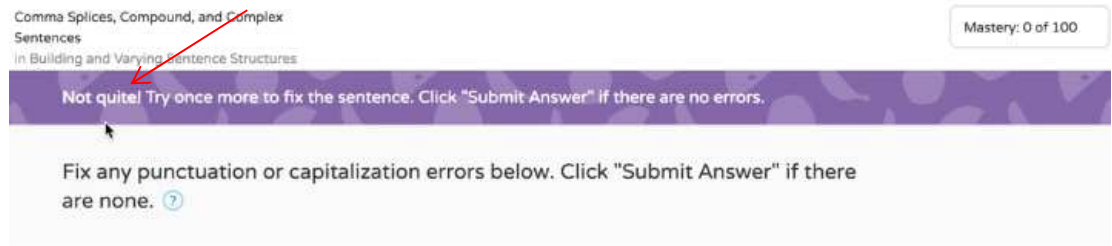
Fix any punctuation or capitalization errors below. Click "Submit Answer" if there are none. ?



Anna Sanchez wore a bright purple wig to the basketball game. Her hair was so wild, in fact, that it distracted the players on the court.

Figure 9. A sample sentence on NoRedInk asking student to fix punctuation or capitalization errors.

If a student answers incorrectly, they will see a message across the top of the screen that says they should try again.



Peeta Mellark has a lot of strange hobbies. He collects broken iPods, for example and makes giant sculptures out of them.

Figure 10. Screenshot from NoRedInk asking student to try again, after failing to punctuate a sentence properly.

After a second incorrect answer, students will see their most recent attempt compared with the correct answer below that. Students are then shown a targeted mini-lesson (e.g. conjunctive adverbs), so they can read through and do some remediation.

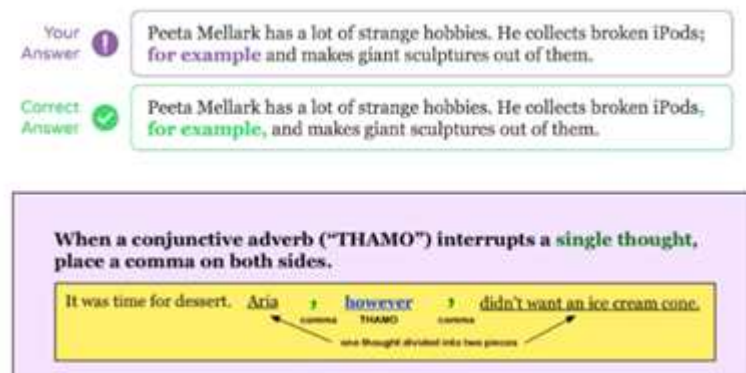


Figure 11. Screenshot from NoRedInk asking student to review a lesson covering the punctuation of conjunctive adverbs, after failing to punctuate a sentence properly.

Lastly, students are prompted to try a similar problem. The new sentence will assess the same concept, but it will provide an entirely new sentence and context. There will even be a new conjunctive adverb, so pattern recognition will not get a student through the problem. They have to understand the concept to master it. Assuming that the remediation works, students will answer the next several questions correctly. As students answer correctly, they will see their mastery increase; this can be seen in the upper right-hand corner.

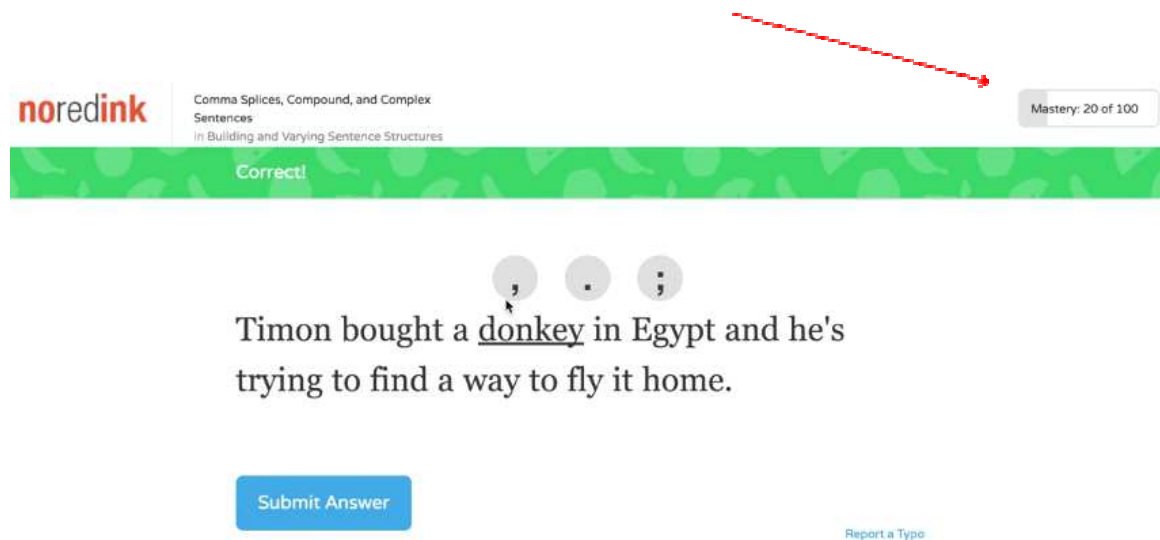


Figure 12. Screenshot from NoRedInk showing the mastery slide.

As a student's mastery increases, the concepts will actually shift subtly or the sentences will get longer. Before students simply needed to bracket any conjunctive adverb with commas, and as the sentences get longer, for example, they might have two independent clauses. Students either need to end the first clause with a period and start a second sentence, or they can use the semi-colon. The site will accept both of these as correct answers.

One goal of NoRedInk is that once students are taught to construct sentences correctly in a variety of ways, the skill will transfer to their writing. Just as topics become a bit more complex as students master them, the concepts throughout the pathway do the same. If a student masters all of the topics and moves further down a pathway, they can click on a lesson before they jump into further practice.

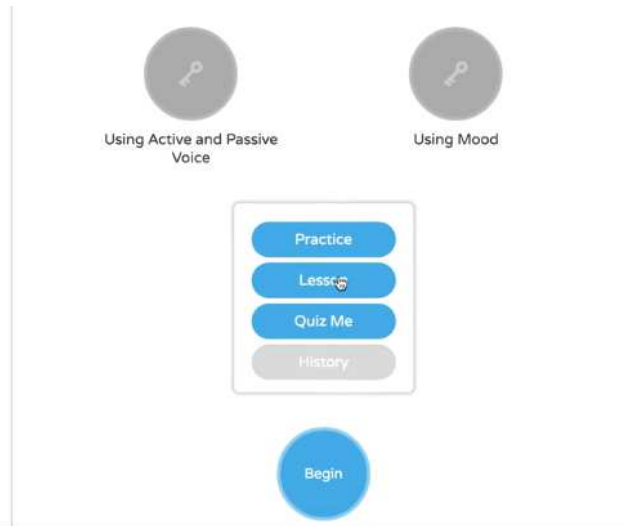


Figure 13. Screenshot from NoRedInk showing the lesson option.

A more complex concept and interface follows as students mastery increases.

Varying Sentences with Voice

Altering Sentences for Emphasis

Readers tend to pay attention to the part of the sentence mentioned *first*. A single sentence can be written multiple ways depending on the part you want to emphasize.

| | |
|--|---|
| Emphasize who/what <i>did</i> the action: | Dave baked the pie last Tuesday. <small>Emphasized</small> |
| Emphasize who/what the action <i>was done to</i> : | The pie was baked by Dave last Tuesday. <small>Emphasized</small> |
| Emphasize <i>when or where</i> : | Last Tuesday, Dave baked the pie. <small>Emphasized</small> |

Figure 14. A lesson on NoRedInk before practice on voice.

The practice page allows students to autonomously work through the site. It is a great opportunity when students finish assignments to do some self-directed learning. As concepts become more complex, student could be asked to rearrange a sentence when practicing concepts.

Figure 15. Screenshot from NoRedInk showing a practice asking students to rearrange a sentence in three ways without changing meaning or tense.

In a passively phrased sentence, a student is first asked to emphasize the doer, secondly students are asked to emphasize who or what the action is done to, and lastly they are asked to emphasize when or where.



Figure 16. Screenshot from NoRedInk showing praise given to students for properly rearranging a sentence in the active voice.

Teacher Log In and Assignment Calendar

When teachers log in, they can use the same features as students by logging in with Google or Clever, or signing in traditionally. When they enter the site, they will be taken to the homepage. Here, teachers can add classes. The class code can be seen to the right of the class's name. Teachers will provide this code to students. Clicking on the "manage students" button, allows teachers to reset passwords and drop students from the course.

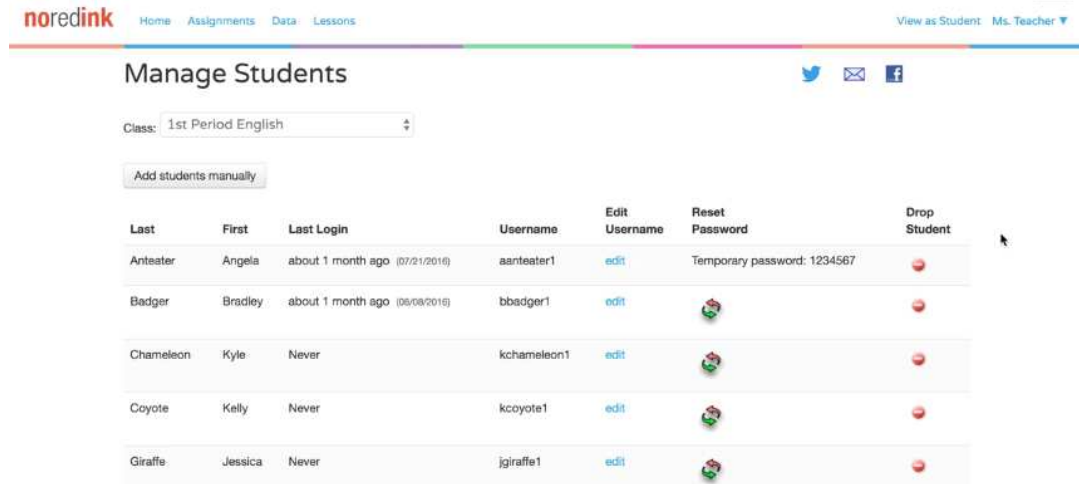


Figure 17. Screenshot showing a teacher's access to the class roster.

There is a new feature on the site called the classroom leader board. You get there by clicking on the podium icon next to the class code. This allows teachers to see the number of students in the class and what they have mastered throughout the year.

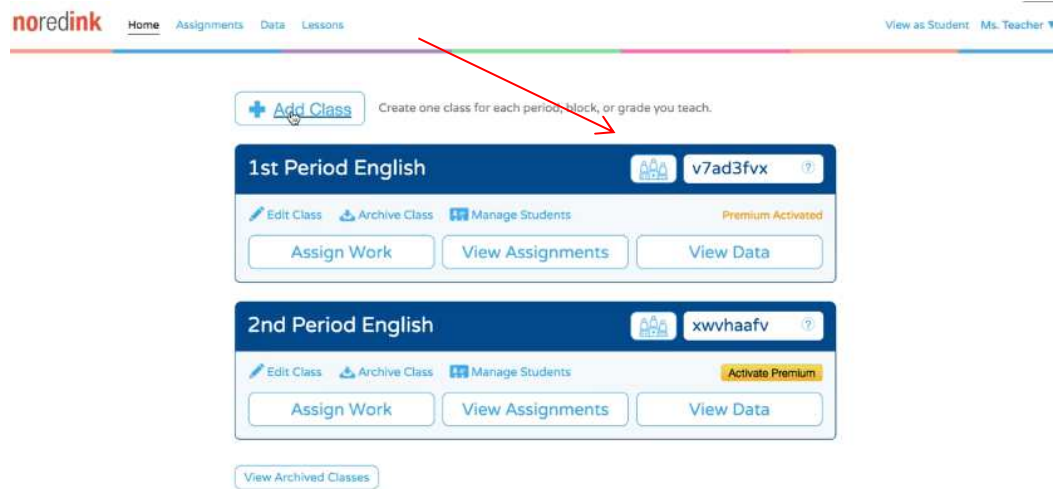


Figure 18. Screenshot showing the icon that allows teachers to access the leaderboard.

There is also a column for topics mastered in a specific month, so teachers can celebrate a variety of students. This is only visible to teachers. This feature connects to

the individual student reporting feature. When a teacher clicks on a student name in the leader board, it will take them to the student's individual results page.



Figure 19. Screenshot showing topics mastered.

In “assignments,” teachers can keep track of assignments that they have given students over the course of a semester. They can see which are in progress, which are upcoming, which are past due, and even those that are archived. Teachers can also assign new assignments and work for students.

The screenshot shows the NoRedInk interface for a teacher. At the top, there is a navigation bar with the NoRedInk logo, links for Home, Assignments, Data, and Lessons, and a user profile for Ms. Teacher. Below this, the page title is "Assignments for 1st Period English" with a "Change Class" dropdown menu. A prominent blue button labeled "Create a New Assignment" is visible. To the right, there are checkboxes for "Diagnostics", "Practice", and "Quizzes", all of which are checked. Below these elements, a section titled "In Progress (5)" displays a calendar view for the month of September. The calendar shows four assignments: a Planning Diagnostic on September 20, a Pre-Test Quiz on September 21, a Practice assignment on September 23, and a Meals in Space Passage Quiz on September 26. Each assignment entry includes a date icon, the assignment type, the title, a brief description, and a "Show All" link. To the right of each entry are icons for analytics, viewing, editing, and deleting.

Figure 20. Screenshot showing link to create assignments in NoRedInk.

NoRedInk suggests starting with a planning diagnostic. The planning diagnostic will measure students' strengths and weaknesses across multiple concepts. A teacher chooses concepts for the diagnostic which will ask students a few questions on each of those concepts. Students' performance of the diagnostic will let their teacher know where they are struggling most. One of the skills that students are struggling with could be the focus on a unit teaching that concept. Let's say students are struggling with adjectives and adverbs (which was determined through the planning diagnostic), a unit diagnostic can be given. A unit diagnostic functions as a pretest on adjectives and adverbs. The unit diagnostic gives much more detailed data on specific subsections of adjectives and adverbs. Teachers will get information about how students are doing, for example, on comparative adverbs as opposed to comparative and superlative adjectives. Next, practice is assigned so that students can master the concepts on the site. This is where students will spend most of their time. The unit is ended with a growth quiz which measures students' proficiency and improvement

from the pre-test unit diagnostic through the growth quiz which functions as a post-test summative assessment.

The screenshot shows a user interface for managing assignments. At the top left is a button labeled "Create a New Assignment". To the right, there are filter options: "Show: Diagnostics Practice Quizzes". Below this is a section titled "In Progress (5)" which contains a table of assignments for the month of "SEPTEMBER".

| SEPTEMBER | | | |
|-----------|--------------------------|---|--|
| 20 | Planning Diagnostic | Beginning-of-Year Planning Diagnostic Adjectives vs. Adverbs, Singular vs. Plural Possessives , Commas for Clari... Show All | |
| 21 | Quiz 10 Points | Pre-Test: Adjectives vs. Adverbs Adjectives vs. Adverbs | |
| 23 | Practice 25 Points | Adjective and Adverb Practice Adjectives vs. Adverbs | |
| 26 | Quiz 20 Points | Meals in Space Passage Quiz Adjectives vs. Adverbs | |
| 28 | Growth Quiz 20 Points | Post-Test: Adjectives vs. Adverbs Adjectives vs. Adverbs | |

Figure 21. Screenshot showing assignment flow.

Creating Different Assignment Types

To assign new work, teachers simply click “Create a New Assignment.” This will take teachers to the assignment form. Here, teachers can give students any of the assignment types on the site. First, teachers must choose which class they would like to assign work to. It is valuable to note that if teachers have multiple sections of classes with the same curriculum, they can assign one task to all of them at once. Teachers can also click on the drop-down menu to choose which students they want to assign work. This is a great tool for differentiation. Let’s say several students aced their pre-test unit diagnostic on adjectives and adverbs, teachers can exempt those students and assign the rest of the class practice.

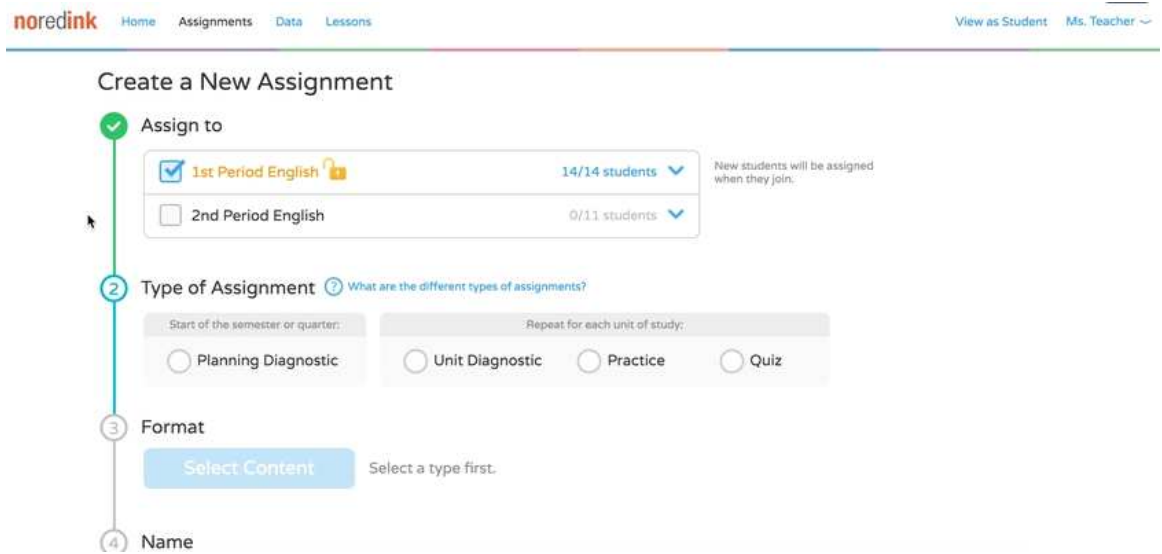


Figure 22. Screenshot showing three assignment types.

After choosing the classes and students, teachers can go into the different assignment types. After selecting an assignment type, teachers can select content. When “select content” is selected, teachers will see all of the pathways on the site.

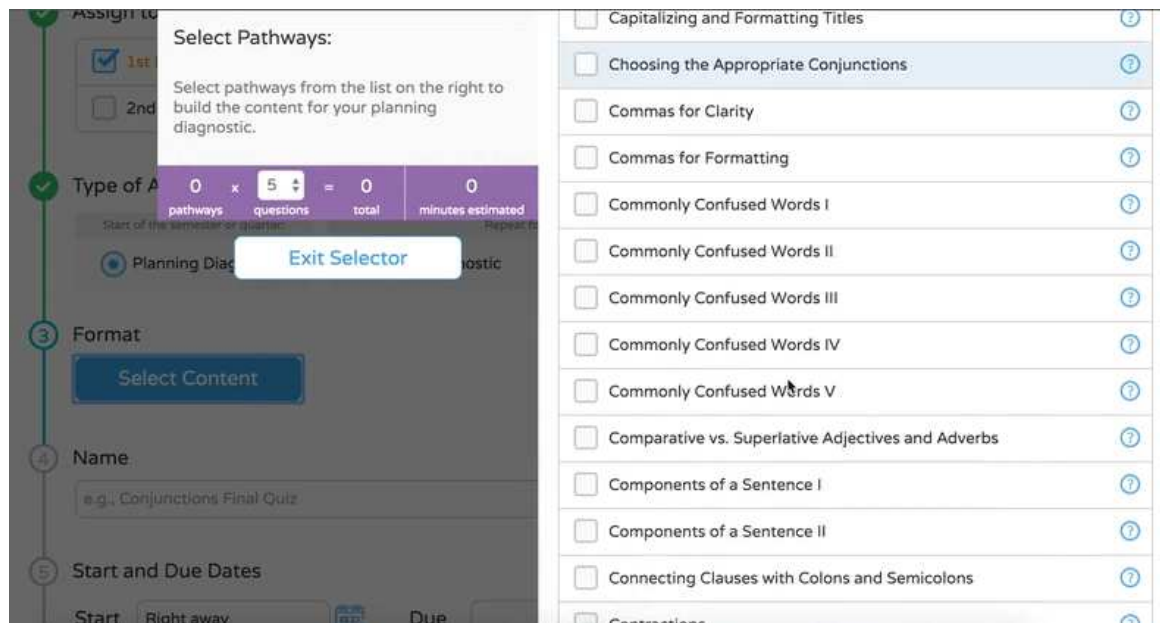


Figure 23. Screenshot showing pathways.

To make it manageable for students, it is recommended that no more than 4-6 pathways are selected to start. From there, teachers name their assignment, choose a start date and a due date, and create the assignment.

The screenshot shows the NoRedInk assignment creation interface. At the top, there are three selected pathways: "Commas for Clarity", "Appositive Phrases", and "Commonly Confused Words I". Below these is a summary bar showing "5 pathways x 7 questions = 35 total" and "23-35 minutes estimated", with an "Add More" button. The "Name" field is filled with "Beginning of year diagnostic". The "Start and Due Dates" section shows "Start" set to "Right away" and "Due" set to "09/22/2016 11:59 pm", with a checked "Allow late submissions" option. A blue "Create Planning Diagnostic" button is at the bottom.

Figure 24. Screenshot showing how to create an assignment on the NoRedInk platform.

NoRedInk Gradebook

The gradebook can be found by clicking on “data,” on the home page. Here, assignments can be filtered by date and type, there is the option of exporting the gradebook as an Excel file, and teachers can track students’ performance on all of the assignments throughout a semester. Clicking on a student’s name, takes instructors to a page which gives them access to individual results.

Tracking Results on NoRedInk

Once students have completed assignments, teachers can go back to the assignment page and begin tracking results for each assignment type. This page is accessed by clicking on the blue graph beside each assignment. A teacher gets bird's-eye view data on students' strengths and weaknesses across multiple concepts.

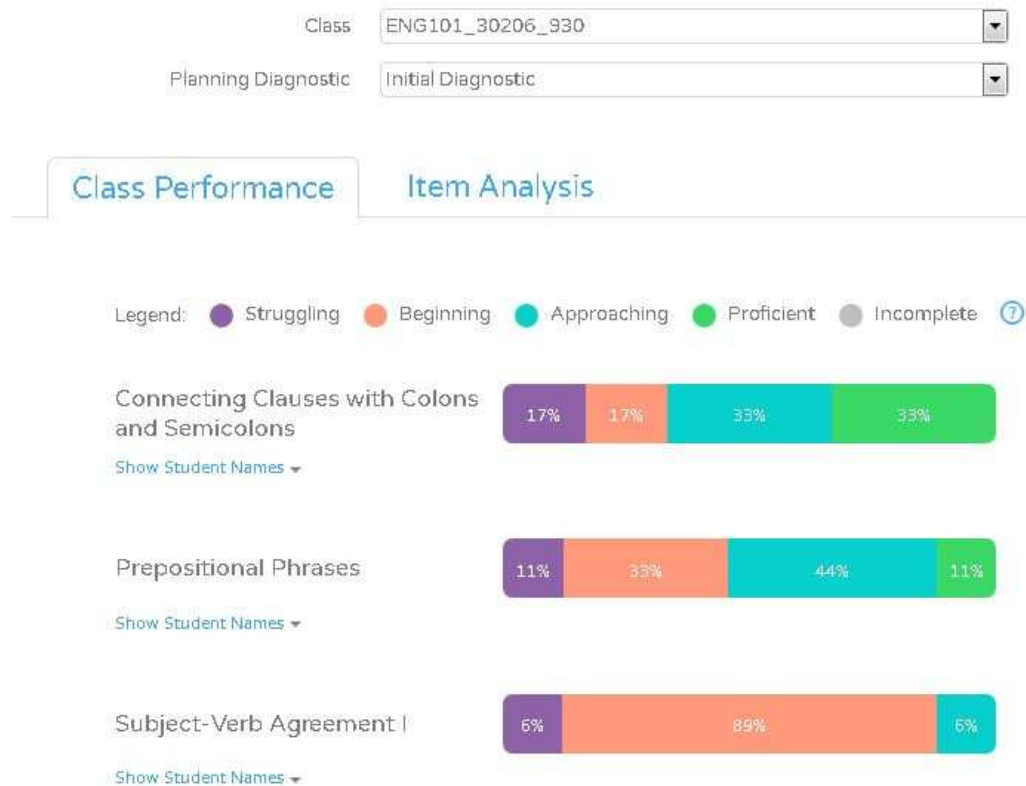


Figure 25. Screenshot showing the performance of one of my classes on the initial diagnostic.

The pathway that this particular class struggled with most on the initial diagnostic was “connecting clauses with colons and semicolons.” My students also struggled with prepositional phrases, subject-verb agreement, punctuation with conjunctions, and verb tense.

Teachers can click on “student names” to see which performance band each student is in. They can also isolate specific topics for assignments or lessons. If a teacher decides, for example, that they want to isolate adjectives and adverbs, they can click on “assign practice.”

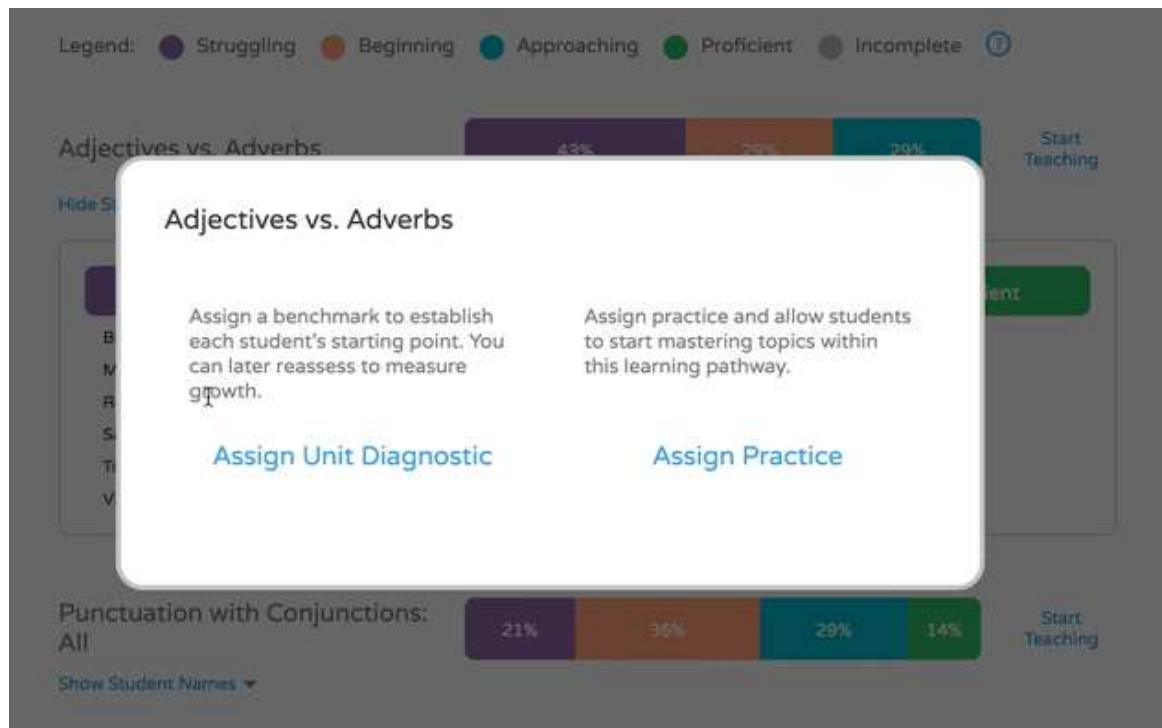


Figure 26. Screenshot showing options for assigning unit diagnostics and practice.

This is also a nice shortcut to assign a unit diagnostic pre-test and then practice. The results of the unit diagnostics are much more specific than those of the planning diagnostics. The data is narrowed down to specific concepts in adjectives and adverbs. Teachers can see how their students performed as a class, the trends of their work, and individual student scores.

From here, teachers can click on a student’s name and see how long she spent on the assignment; teachers can get details about how a particular student performed on

sub-sections in the pathway.

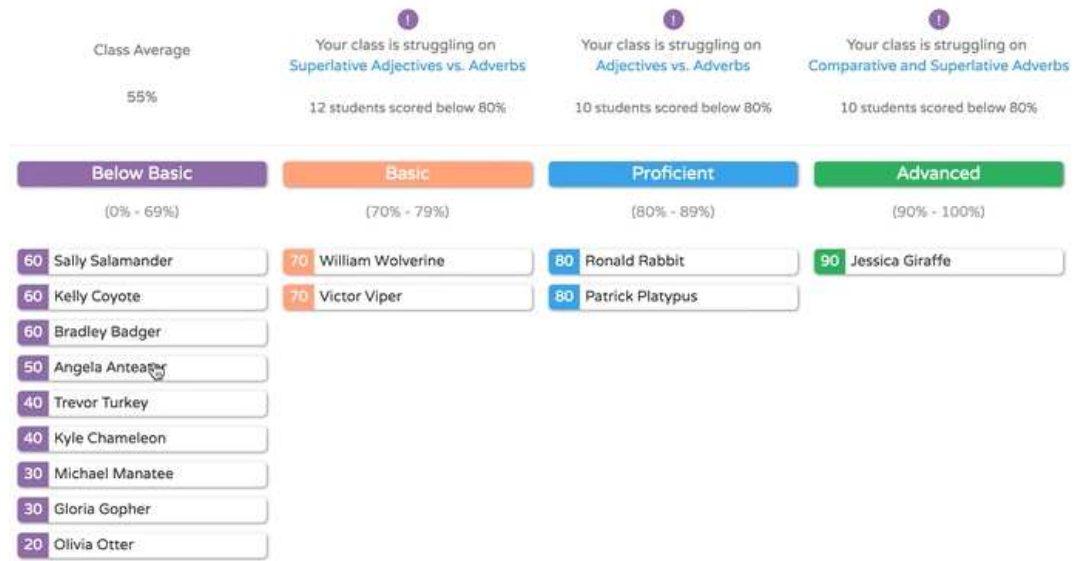


Figure 27. Screenshot showing student averages on specific pathways.

Teachers can also click on “item analysis.” This is an option on each of the quiz pages. Here, teachers can see each student’s answers for every question throughout the quiz. A green checkmark means that the student answered correctly on their first attempt. The red checkmark means that a student went back immediately after the test and did remediation. Remedial teaching is offered to students after completing quizzes.

| | | SCORE | PERCENT | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|-------------------|-------|---------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----|
| 1 | Arnteater, Angela | 5/10 | 50% | ✗ ₁ | ✗ ₁ | ✗ ₁ | ✓ | ✗ ₁ | ✓ | ✗ ₁ | ✓ | ✓ | ✓ |
| 2 | Badger, Bradley | 6/10 | 60% | ✓ | ✓ | ✓ | ✓ | ✗ ₁ | ✗ ₁ | ✗ ₁ | ✓ | ✗ ₁ | ✓ |
| 3 | Chameleon, Kyle | 4/10 | 40% | ✓ ₂ | ✓ ₃ | ✓ | ✓ | ✗ ₂ | ✗ ₂ | ✗ ₂ | ✓ | ✓ ₂ | ✓ |
| 4 | Coyote, Kelly | 6/10 | 60% | ✓ ₂ | ✓ | ✗ ₅ | ✓ | ✗ ₂ | ✓ | ✗ ₂ | ✓ | ✓ | ✓ |
| 5 | Giraffe, Jessica | 9/10 | 90% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ ₂ | ✓ | ✓ | ✓ |
| 6 | Gopher, Gloria | 3/10 | 30% | ✓ ₂ | ✗ ₂ | ✗ ₃ | ✗ ₅ | ✓ | ✗ ₃ | ✗ ₃ | ✗ ₂ | ✓ | ✓ |
| 7 | Manatee, Michael | 3/10 | 30% | ✓ ₂ | ✗ ₂ | ✗ ₂ | ✓ | ✗ ₂ | ✓ | ✗ ₄ | ✗ ₂ | ✗ ₂ | ✓ |
| 8 | Otter, Olivia | 2/10 | 20% | ✓ ₂ | ✗ ₂ | ✗ ₃ | ✓ | ✗ ₂ | ✗ ₂ | ✗ ₂ | ✗ ₂ | ✗ ₂ | ✓ |
| 9 | Platypus, Patrick | 8/10 | 80% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ ₂ | ✓ | ✗ ₄ | ✓ |
| 10 | Rabbit, Ronald | 8/10 | 80% | ✓ | ✗ ₁ | ✓ | ✓ | ✗ ₁ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11 | Salamander, Sally | 6/10 | 60% | ✓ | ✗ ₁ | ✗ ₂ | ✓ | ✗ ₁ | ✓ | ✗ ₂ | ✓ | ✓ | ✓ |
| 12 | Turkey, Trevor | 4/10 | 40% | ✗ ₁ | ✗ ₁ | ✓ | ✓ | ✗ ₁ | ✗ ₁ | ✗ ₁ | ✓ | ✗ ₁ | ✓ |
| 13 | Viper, Victor | 7/10 | 70% | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ ₁ | ✗ ₁ | ✗ ₁ | ✓ |

Figure 28. Screenshot showing the number of attempts it took a student to answer a question correctly.

You can see that “Michael Manatee” had four attempts before he got the right answer. Each of the student’s attempts can be seen by clicking on the green checkmark.

The screenshot shows a gradebook with a pop-up window for 'Question 7'. The pop-up window displays the following information:

- Question 7** (with a close button)
- It took Michael Manatee 4 attempts to get this question correct.
- Attempt #1**
Michael's Answer: Arwen cheered the wildest of all the fans.
Correct Answer: Arwen cheered the **most wildly** of all the fans.
- Attempt #2**
Michael's Answer: Arwen cheered the most wild of all the fans.
Correct Answer: Arwen cheered the **most wildly** of all the fans.
- Attempt #3**
Michael's Answer: Of all the dancers, Knuckles the Echidna glides most silent.
Correct Answer: Of all the dancers, Knuckles the Echidna glides **most silently**.
- Attempt #4**
Michael's Answer: Michael Scott whistles the most quietly of all the shepherds.
Correct Answer: Michael Scott whistles the **most quietly** of all the shepherds.

Figure 29. Screenshot of sample gradebook in NoRedInk.

If a student did not go back and do remediation, there will be a red X with the number one beside it.

As is evident from this walk-through of the features of NoRedInk, the tool offers a powerful suite of tools for instructors to support student learning through personalized learning. There are purported pros and cons to personalized learning. Personalized learning encompasses a broad range of possibilities—from customized interfaces to adaptive tutors, from student-centered classrooms to learning management systems. Bulger (2016) emphasizes that since personalized learning systems are relatively new and largely untested, the impact on students' regulation of their learning remains unclear and this creates tensions between what is being promised on behalf of personalized learning and the practical reality.

CHAPTER 4

QUANTITATIVE AND QUALITATIVE RESEARCH: A MIXED-METHODS APPROACH

“I felt clueless, a feeling I have since come to learn is at the heart of the scholarly process. In academia, one is in a perpetual liminal space. As soon as you answer a research question, you ask another, your growing body of expertise simply marking the expanding edge of your ignorance.”

~David Gold “The Accidental Archivist”

In this chapter, I outline my methodology and the methods used to collect data, discussing each phase of my project. I also describe the setting where the study took place and the students that made up my classroom. I end with a discussion of the paradigm of participatory action research to investigate pedagogical approaches to grammar instruction in the digital age. Early on in my planning of this study, I decided that a mixed-methods approach would be best for my research. Linking qualitative and quantitative methods had a positive influence upon the validity and usage of my findings. The third approach I took was to use participatory action research as part of my qualitative methods. I will use my research to provide information that is useful to a particular group of people (composition instructors) who will empower the members of that group to create change as a result of the research (Berg). The individuals involved in my study are contributing actors in the research. I researched the use of the digital grammar tool, NoRedInk, in a community college

classroom in order to advance new knowledge in the field that may also inform my own teaching skills. This exploratory research also examined students' attitudes towards using NoRedInk. The following questions guided my research:

1. How do students experience NoRedInk in the context of a community college writing class?
2. Is there a relationship between students' attitudes towards grammar and their performance on the digital platform?

The nature of my research questions lent itself to a mixed-methods approach. One methodology could not provide me with all the information my study required. In writing and composition studies of grammar instruction, both qualitative and quantitative approaches to new teaching methods have value. Triangulation is the main advantage of a mixed-methods approach. I hoped that my variation in data collection would strengthen the validity of the results. Integrating all of the data led to clarity and a better understanding of the findings.

In the seminal text, *Composing Research*, Johaneck presents the opposition between quantitative and qualitative research methods and suggests moving away from this competition by paying greater attention to content. Johaneck posits that compositionists should consider "the contexts from which [their] research questions come" and allow these contexts to "guide [their] methodological decisions" (p. 12). She feels that anecdotal writing and personal narrative have hindered the research potential of the field of composition. Personal narratives should be blended with other qualitative and quantitative research. Johaneck discusses the conflict between qualitative and quantitative research approaches. She believes that research design

should “emerge naturally from the need to know, from a question arising from a particular context that will . . . lead to the best research method(s) available for answering that question at that moment” (p. 108). Johaneck encourages composition researchers to “explore a question in the context of the researcher’s curiosity, experience and available resources” (p. 186). It is through this practice that a methodology should be chosen. All research methods have limits in the questions they can answer, so their value depends on the context (pp. 27-28). We should not ask if one method is better, but whether or not it is appropriate for the context.

Building upon Johaneck’s suggestion to use hybrid methodologies, Rickly (2007) argues that the required graduate course should include the utilization and rhetorical application of research methods. She highlights this need, especially, in technologized sites of research. The digital age requires increased curricular attention to empirical field research. Students need to be given the opportunity to apply methods. Rickly also maintains that the kinds of methods described by “static, linear, rigid” methodologies aren’t adequate and recommends that “emerging and established scholars adopt a situated, contextualized, rhetorical approach for the conduct of research that might better prepare us to conduct, critique, and teach research in a digital age” (p. 379). The digital environment is constantly in flux. Technological research contexts can be viewed from a variety of perspectives: material, intellectual, historical, social, and political (p. 385). We should be immersed in our research and be willing to adapt research methods depending on the rhetorical situation. The technological nature of my study necessitated a mixed methods approach.

Herd and Nahrwold's approach, like Johaneck's, is pragmatic in that it maintains that the purpose of research is determined by commitments to social action. Herndl and Nahrwold (2000) draw upon the work of many scholars like Bourdieu and Bauman to argue for a theory of research as social practice. They touch upon the difficulties of objectivity and the political nature of social inquiry. Questions of ethics are also explored. They explore the many problems of postmodern ethics, the challenges of doing critical work in an ethical way, and the impact of ethics upon fieldwork. Like Johaneck, Herndl and Nahrwold discuss what drives researchers to be attached to one theoretical position rather than another. Citing Kirsch (1992), they state that most research in composition is "opportunistic . . . researchers choose the methods that will best address their questions" (p. 268).

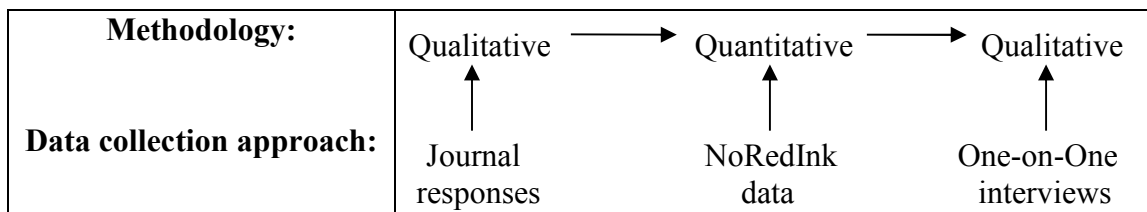
Lindlof and Taylor's introduction to qualitative methodology gives a comprehensive picture of the theory and techniques of qualitative research. They argue:

Qualitative researchers seek to preserve and analyze the situated form, content, and experience of social action, rather than subject it to mathematical or other formal transformation . . . Unlike naturalistic inquiry, qualitative research is not always carried out in the habitat of cultural members . . . Unlike ethnography, qualitative research does not always immerse the researcher in the scene for a prolonged period, adopt a holistic view of social practices, or broadly consider their cultural and historical contexts . . . Most communication scholars, for example, consider qualitative research to be the broadest and most inclusive term for these phenomena (p. 18).

Qualitative research has a pragmatic use, but some limitations. Qualitative research is an “umbrella term covering an array of interpretive techniques which seek to describe, decode, translate and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world” (Van Maanen, 1983). Qualitative inquiry necessitates a researcher’s engagement and dialogue with communities of study.

Table 1

Example of a mixed-method design



Reliability and Validity

My research falls under both qualitative and quantitative research. I utilized both quantitative and qualitative data collections tools. There are advantages to linking qualitative and quantitative methods when performing studies and evaluations, and the validity and usefulness of findings will benefit from this linkage (Miles & Huberman, 1994). In my study, a quantitative analysis was applied because it allowed me to use structured questions where the response options were predetermined (NoRedInk modules) to explore the teaching of grammar. After giving information, a qualitative approach provides more opportunities for exploration; I am interested in the ‘why,’ not the ‘how’ through the analysis of unstructured information—like interview transcripts, journal responses, and field notes. Both qualitative and quantitative approaches to new

teaching methods have value. I will use statistical methods for gathering and analyzing quantitative data (Silverman, 1995, p. 2). If I applied only quantitative methods, I would be at risk of not taking into account individual, situational, historical, and contextual factors (Fidel, 1993, p. 233). Using a qualitative approach in addition to a quantitative approach enhanced my study because it did not limit my students' input to a set of predetermined responses.

Qualitative research methods [observation, analysis of texts and documents, interviews (open-ended questions), records and transcripts] were used to gather information. Open-ended data collection methods such as in-depth interviews embedded in structured research are valuable in qualitative research (Kidder & Fine, 1987). My use of several different methods ensured validity. (Fidel, 1993, p. 232). This triangulation was an attempt to get corroboration; I approached my research by several independent routes, providing a confirmatory measure and improving my understanding of the findings. Researchers and scholars differ about the respective merits of the two approaches. The distinctions affect the nature of research designs. Triangulation explicates complementary aspects of both qualitative and quantitative data collection methods (Denzin, 1970; Jick, 1979; Mingers, 1997, 2001; Reichardt & Rallis, 1994).

It has been increasingly recognized that all data collection—quantitative and qualitative—operates within a cultural context and is affected to some extent by the perceptions and beliefs of investigators and data collectors. My aim was to collect, analyze, and interpret data by observing what my students did and said. I was looking to gain insight into my students' attitudes, behaviors, concerns, and motivation, in

relation to grammar and writing instruction. In analyzing the data, I was not trying to generalize results, but rather obtain a greater understanding about the problem studied. Student-focused qualitative studies are advantageous when applied to the assessment of inquiry based teaching methods. I used a learner focused approach to assessing the teaching of grammar. The methods I used provided me with detail about the relevant cognitive processes used by my students; this will help me improve classroom activities (Briggs et. al., 2011).

Qualitative researchers emphasize the human factor and the intimate knowledge of the research setting; this provides information about the social processes in a specific setting (Neuman, 2000, p. 126). In Henning, Van Rensburg, and Smit (2004) it is stated that qualitative research is flexible; the open-ended questions allow participants to give their own views and hence attempt to understand people from their own frame of reference (Henning, p. 5). On the contrary, Creswell (1998) defines the quantitative approach as an analysis of a social or human problem based on testing composed of variable, measured with numbers, and analyzed with statistical procedures in order to determine whether the predictive generalization of theory hold true (1-2). The validity of results can be strengthened by using more than one method to study the same phenomenon. It also sharpens the researcher's understanding of the findings.

Triangulating the Data

I used multiple methods to enhance understanding of phenomena, i.e. triangulation, as coined by Denzin (1978). Lincoln and Guba (1981) suggest that triangulation is one important means of demonstrating the credibility of a qualitative

study. My qualitative methods augmented the findings of the qualitative results. Greene, Caracelli, and Graham (1989) suggested a “between methods” approach. Two major purposes of a mixed methods evaluation design are triangulation and complementarity. Though complementarity, quantitative and qualitative methods are combined to use results from one method to elaborate on results from the other method or to use results from one method to help develop or inform the other method. This approach allows researchers to focus on different facets of a phenomenon, to look at phenomenon sequentially to observe development, to discover paradoxes and new perspectives, and to add depth and breadth to a study (Liebscher, p. 672). I juxtaposed methods to expose both their strengths and their weaknesses. Each of these qualitative and quantitative data sources has weaknesses but when these sources are combined, a fuller picture of student understanding and interpretation of their learning experience. My expectation was that weaknesses in one methodology would be compensated for by strengths in the other. Triangulation is the main advantage of a mixed-methods approach. Creswell and Clark (2007) observe that the triangulation design, possible only in a mixed methods approach, capitalizes on the strengths of both quantitative and qualitative design, and is “used when a researcher wants to directly compare and contrast quantitative statistical results with qualitative findings or to validate or expand quantitative results with qualitative data” (pp. 62, 65). Triangulation helped me connect the data sources to the research hypotheses. Triangulation is a strategy for enhancing validity in a case study (Merriam, 1998). It overcomes the weaknesses in each data sources, reducing bias. Students’ scores on NoRedInk do not tell the whole

story. This data, for example, does not tell me what my students' attitudes are or how much effort they invested in the course.

After an analysis of aggregate data, I analyzed my qualitative data, looked at students' attitudes in both their journal entries and one-on-one interviews, and reviewed my field notes to collect data from my sustained interaction with my students in their natural setting (the classroom). I conducted semi-structured one-on-one interviews with many of my students. I conducted 23 interviews, each ranging from 20 minutes to an hour in length. I audiotaped the interviews with my iPad and then transcribed all of them. Some were more useful than others; the students who elaborated on their responses were most beneficial. However, even the short interviews had some value.

I began my analysis by using coding to organize and group my data. In vivo coding, a process that uses wording that participants use, allowed me to group together common concepts into themes (Glaser & Strauss, 1967). Line-by-line coding ensured that I was able to discover important concepts and categories. "Our analysis and interpretation—our study's findings—will reflect the constructs, concepts, language, models, and theories that structured the study in the first place" (Merriam, 1998). It is not only your approach to qualitative inquiry (e.g., case study, ethnographic, phenomenological) and ontological, epistemological, and methodological issues that influence and affect your coding decisions (Creswell, 1998; Mason, 2002). After the initial read through of my data, I divided the text into segments and began labeling my data with codes. After I coded the data and reduced overlap, I collapsed the codes into themes. I used an approach most similar to that of Sharan Merriam (1998). Merriam

(1998) argues that qualitative research is an umbrella concept covering several forms of inquiry that “help us understand and explain the meaning of social phenomena with as little disruption to the natural setting as possible.” Similar to Merriam, I tried to construct a theory through observation and intuitive understandings gained in the field. My sample was non-random, purposeful, and small. “Purposeful sampling is based on the assumption that the investigator wants to discover, understand and gain insight and therefore must select a sample from which the most must be learned” (Merriam, 1998). My interviews were more open-ended and less structured.

In vivo coding, assigning a label to a section of data—such as my interview transcripts—helped me to expose themes. Using these themes to organize my raw data ensured the validity of my work.

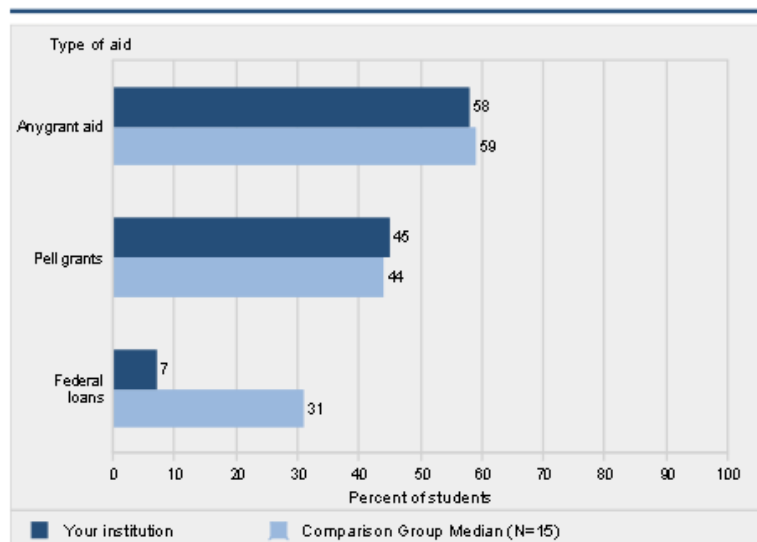
Sample and Context

My sample for this study consisted of 17 students, 6 male and 11 female, from two sections of *English 101: College Composition* at a community college in Connecticut. [All of the student names in this paper are pseudonyms.] At the beginning of the Fall 2016 semester, I had 22 students registered for one section of composition (30206), and 20 students registered for the other (30220). I was hoping that at least two-thirds of the registered students would participate in my research study. I was a little worried about the number of students who would continue to participate through the end of the study. Regrettably, thirty percent of college and university students drop out after their first year (Bowler, 2009). Half never graduate, and college completion rates in the United States have been dropping for more than three decades. “The overall record is quite bad, especially for African-Americans and

other minorities,” says Kati Haycock, President of the Education Trust, a nonprofit group in Washington that works to close achievement gaps. Teaching at a community college, I often experience lower than usual retention rates. An analysis of Education Longitudinal Study (ELS: 2002-06) data shows:

Forty-four percent of low-income students (those with family incomes of less than \$25,000 per year) attend community colleges as their first college after high school. In contrast, only 15 percent of high-income students enroll in community colleges initially. Similarly, 38 percent of students whose parents did not graduate from college choose community colleges as their first institution, compared with 20 percent of students whose parents graduated from college (Fain, 2015).

Non-traditional students face many challenges, such as college readiness, maintaining financial commitments, and balancing families. The Integrated Postsecondary Education Data System (IPEDS) collects institution-level data on student enrollment, graduation rates, student charges, program completions, faculty, staff, and finances. I looked at the most recent report, from 2015, to obtain information about the percentage and type of aid that my students at Three Rivers Community College receive.



NOTE: Any grant aid above includes grant or scholarship aid from the federal government, state/local government, the institution, or other sources. Federal loans includes only federal loans to students. N is the number of institutions in the comparison group.
 SOURCE: U. S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS): Winter 2014-15, Student Financial Aid component.

Figure 30. Percentage of undergraduates receiving aid by type, 2013-2014.

Table 2

Enrollment by Age

| Gender | FALL12 | FALL13 | FALL14 | FALL15 | FALL16 | 5-year Average |
|--------------|-------------|-------------|-------------|-------------|-------------|----------------|
| Male | 2064 | 1943 | 1867 | 1805 | 1762 | 1888 |
| Female | 2926 | 2810 | 2667 | 2459 | 2497 | 2672 |
| Total | 4990 | 4753 | 4534 | 4264 | 4259 | 4560 |

| Gender | FALL12 | FALL13 | FALL14 | FALL15 | FALL16 | 5-year Average |
|--------------|-------------|-------------|-------------|-------------|-------------|----------------|
| Male | 782 | 799 | 751 | 701 | 668 | 740 |
| Female | 787 | 810 | 736 | 706 | 716 | 751 |
| Total | 1569 | 1609 | 1487 | 1407 | 1384 | 1491 |

| Gender | FALL12 | FALL13 | FALL14 | FALL15 | FALL16 | 5-year Average |
|--------------|-------------|-------------|-------------|-------------|-------------|----------------|
| Male | 1282 | 1144 | 1116 | 1104 | 1094 | 1148 |
| Female | 2139 | 2000 | 1931 | 1753 | 1781 | 1921 |
| Total | 3421 | 3144 | 3047 | 2857 | 2875 | 3069 |

Table 3

Enrollment by Age (% of student body)

| Gender | FALL12 | FALL13 | FALL14 | FALL15 | FALL16 | 5-year Average |
|---------------|---------------|---------------|---------------|---------------|---------------|-----------------------|
| Male | 41% | 41% | 41% | 42% | 41% | 41% |
| Female | 59% | 59% | 59% | 58% | 59% | 59% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% |

| Gender | FALL12 | FALL13 | FALL14 | FALL15 | FALL16 | 5-year Average |
|---------------|---------------|---------------|---------------|---------------|---------------|-----------------------|
| Male | 50% | 50% | 51% | 50% | 48% | 50% |
| Female | 50% | 50% | 49% | 50% | 52% | 50% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% |

| Gender | FALL12 | FALL13 | FALL14 | FALL15 | FALL16 | 5-year Average |
|---------------|---------------|---------------|---------------|---------------|---------------|-----------------------|
| Male | 37% | 36% | 37% | 39% | 38% | 37% |
| Female | 63% | 64% | 63% | 61% | 62% | 63% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% |

Table 4

Enrollment by Race and Ethnicity (Office of Institutional Research)

Fall Semester Enrollment by Race and Ethnicity

| Race and Ethnicity | FALL12 | FALL13 | FALL14 | FALL15 | FALL16 | 5-year Average |
|---|-------------|-------------|-------------|-------------|-------------|----------------|
| American Indian or Alaskan Native | 42 | 35 | 25 | 25 | 39 | 33 |
| Asian | 209 | 185 | 170 | 168 | 175 | 181 |
| Black or African American | 395 | 360 | 351 | 334 | 370 | 362 |
| Native Hawaiian or Other Pacific Islander | 15 | 12 | 14 | 11 | 14 | 13 |
| Hispanic or Latino | 631 | 688 | 677 | 644 | 688 | 666 |
| White | 3313 | 3111 | 2928 | 2712 | 2632 | 2939 |
| Two or more races | 182 | 177 | 198 | 207 | 199 | 193 |
| Race/Ethnicity Unknown | 203 | 185 | 171 | 163 | 142 | 173 |
| Total | 4990 | 4753 | 4534 | 4264 | 4259 | 4560 |

Fall Semester Enrollment by Race and Ethnicity

| Race and Ethnicity | FALL12 | FALL13 | FALL14 | FALL15 | FALL16 | 5-year Average |
|---|-------------|-------------|-------------|-------------|-------------|----------------|
| American Indian or Alaskan Native | 1% | 1% | 1% | 1% | 1% | 1% |
| Asian | 4% | 4% | 4% | 4% | 4% | 4% |
| Black or African American | 8% | 8% | 8% | 8% | 9% | 8% |
| Native Hawaiian or Other Pacific Islander | 0% | 0% | 0% | 0% | 0% | 0% |
| Hispanic or Latino | 13% | 14% | 15% | 15% | 16% | 15% |
| White | 66% | 65% | 65% | 64% | 62% | 64% |
| Two or more races | 4% | 4% | 4% | 5% | 5% | 4% |
| Race/Ethnicity Unknown | 4% | 4% | 4% | 4% | 3% | 4% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% |

Case Boundaries

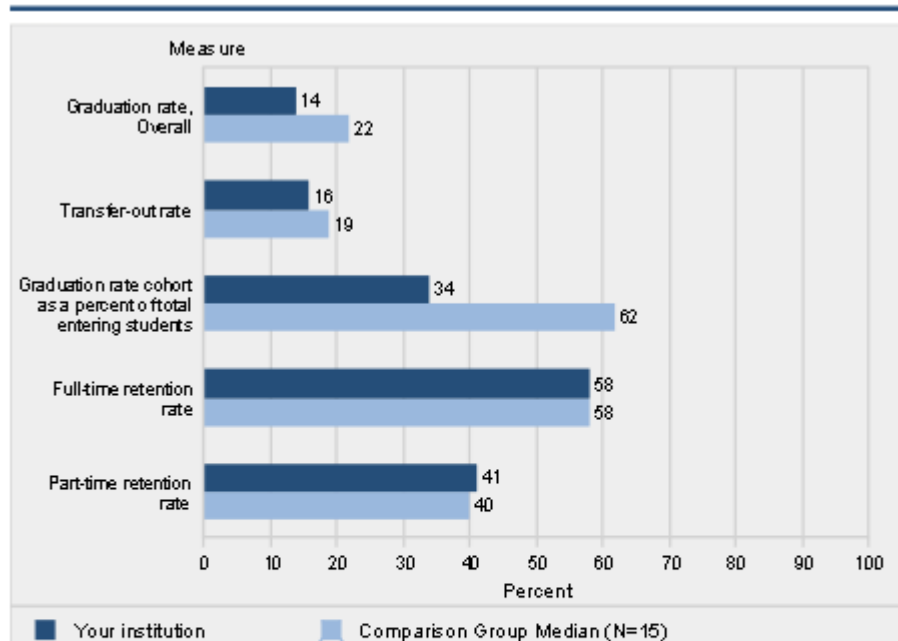
The setting of my study was Three Rivers Community College (TRCC), in Norwich, Connecticut. The study was conducted in a community college that serves Southeastern Connecticut and eastern regions of the state with a variety of credit and non-credit degree and certificate programs. Three Rivers was formed in 1992 as a result of a mandate enacted by the Connecticut General Assembly which merged community and technical colleges in five geographic areas around Connecticut.

Named in recognition of the region's three primary rivers—the Shetucket, the Yantic, and the Thames—Three Rivers Community College (TRCC), now at a single location, was formed from the merger of Mohegan Community College and Thames Valley State Technical College (*Three Rivers Community College Fact Book*, 2016).

Three Rivers Community College has a 100% acceptance rate.

In order to get permission to conduct this research, I had to get approval from American University's Institutional Review Board (IRB). Because I am the teacher, I had to make IRB adjustments to ensure research integrity. I obtained permissions ensuring no coercions. Students signed consent forms if they wished to participate in my research study. Renee Hobbs, my dissertation Chair, visited my classes at TRCC, explained my research, and collected consent forms from my students.

According to the *Three Rivers Community College Fact Book*, which includes 5-year trend data on student enrollment, retention, and completion, the student population consists of more than 5,000 enrolled students each semester and 2,500 Continuing Education students. Enrollment continues to grow each year. The student body is composed of 58% women and 42% men. Approximately six percent are under the age of eighteen, forty-eight percent are between the ages of eighteen and nineteen, nineteen percent are between the ages of twenty and twenty-one, ten percent are between the ages of twenty-two and twenty-four, and seventeen percent are twenty-five or older. One percent of students is Native American, four percent are Asian American, eight percent are African American, nine percent are Hispanic, seventy-three percent are Caucasian, and five percent are of unknown ethnicity. The student faculty ratio is 17:1. The graduation rate at TRCC is 14%.



NOTE: Graduation rate cohort includes all full-time, first-time degree/certificate-seeking undergraduate students. Graduation and transfer-out rates are the Student Right-to-Know rates. Only institutions with mission to prepare students to transfer are required to report transfer out. Retention rates are measured from the fall of first enrollment to the following fall. For more details, see the Methodological Notes. N is the number of institutions in the comparison group.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS): Winter 2014-15, Graduation Rates component and Spring 2014, Fall Enrollment component.

Figure 31. Graduation rate and transfer-out rate (2011 cohort); graduation rate cohort as percent of total entering students, and retention rates of first-time students (Fall 2014).

According to the college’s mission, “Three Rivers is an accessible, affordable, and culturally diverse community college that meets varied educational needs by creating an environment that stimulates learning.” To accomplish its mission, Three Rivers Community College:

- Offers post-secondary educational opportunities;
- Encourages life-long learning;

- Provides a well-rounded and rewarding educational experience with an emphasis on critical thinking, effective communication, and the College’s institutional values;
- Fosters an appreciation of the natural and social sciences, humanities, technology and the arts;
- Helps students achieve their goals;
- Serves as a community resource for people and institutions within its service area;
- Delivers its services efficiently and measurably; and
- Contributes to economic development of this region and the state.

Three Rivers Community College’s vision is that it will be a college of choice with a reputation for innovation, quality, and accessibility, serving a dynamic student population (“Mission, Vision and Values”).

The students who participated in the study were diverse and struggled with an array of issues. Many students have undocumented parents or were themselves undocumented and worried about their future in the United States. Some did not live with their parents but with their grandmother, aunt, or other relative. Their academic levels, language proficiency, and engagement in school also varied widely. Some students were fully bi-lingual, and others were recent migrants with limited English proficiency. Each student brought a unique perspective to class.

An analysis by the Community College Research Center [CCRC] (2012), *A Matter of Degrees*, states “six years after beginning community college, fewer than half of the students who entered college with a goal of earning a degree or certificate

have earned a credential, transferred to a four-year institution, or are still enrolled in their community college” (“A Matter of Degrees,” 2000, p.6). In one of my courses (30220), an average of 16 students attended class on a weekly basis. In my second course (30206), an average of 10 students attended class on a weekly basis. Below is a chart of students who attended on a regular basis (A), withdrew from the course (W), or did not attend but failed to withdraw (UF) [the unearned F notation is awarded to students who did not officially withdraw, but who failed to participate in course activities through the end of the term].

Table 5

Students' attendance

| Section 30220 | | | Section 30206 | | |
|---------------|----------|----|---------------|----------|----|
| 1 | Tonya | A | 1 | Hermione | UF |
| 2 | Brian | UF | 2 | Mustapha | A |
| 3 | Anderson | A | 3 | Sabriel | A |
| 4 | Jenny | W | 4 | Dorian | UF |
| 5 | Matthew | UF | 5 | Holden | A |
| 6 | Donna | A | 6 | Pete | UF |
| 7 | Tess | A | 7 | Jackson | UF |
| 8 | Sophia | A | 8 | Scarlett | UF |
| 9 | Daisy | UF | 9 | Jacques | UF |
| 10 | Hester | UF | 10 | Amelia | UF |
| 11 | Penelope | A | 11 | Arwen | A |
| 12 | Saffron | W | 12 | Ava | A |

| | | | | | |
|----|---|---|----|-----------|----|
| 13 | Beatrice | A | 13 | Jordan | A |
| 14 | Cordelia (did not consent to participate) | A | 14 | Winston | A |
| 15 | Sawyer | W | 15 | Atticus | A |
| 16 | Rhett | A | 16 | Athena | UF |
| 17 | Jules | A | 17 | Jake | UF |
| 18 | Scout | W | 18 | Eliza | UF |
| 19 | Josephine | A | 19 | Stuart | A |
| 20 | Shirley | A | 20 | Charlotte | A |
| | | | 21 | Jeremiah | A |
| | | | 22 | Aphrodite | A |

Qualitative analyses typically require a smaller sample size than quantitative analyses (Creswell, 1998). The difference in sampling between quantitative and qualitative studies is due to the distinct goals of each approach. According to the survey organization, Westat, the ability to generalize to the population with a known degree of accuracy is less important than the ability to measure the impact of an experimental treatment or condition when conducting non-probability sampling (Westat, 2015). Qualitative sample size may best be determined by the time allotted, resources available, and study objectives (Patton, 1990). Because my intent was not to generalize, I was more concerned about sample and response bias than I was about the size of my sample. Several students did not complete all of the assigned NoRedInk modules, so I experienced some sample bias. I made repeated attempts to obtain

missing data from non-respondents. I continually reminded students who were absent or who did not finish a module to complete it as soon as they could. Comparing the characteristics of my non-respondents to my respondents, there were not any suspected differences. While interviewing, I tried to remedy possible response bias by asking open-ended (not leading) questions. None of the questions were threatening, and I did not sense any misunderstanding of the questions or fabricated responses. Although not a longitudinal study, data was collected at designated time intervals, so that I could study my population at different points in time (from the beginning to the end of a 16 week semester). Loss of respondents did affect my ability to make generalizations, but because student retention is a typical issue at a community college, I anticipated that my number of respondents would decrease as the end of the semester advanced. Of the 42 students who were registered for two sections of my course sections, 1 student chose not to participate, 4 students withdrew, and 14 failed to participate in class activities through the end of the term. Of the 23 students who attended class regularly, 17 completed the assigned NoRedInk modules, including the initial and semester-end diagnostic. As previously mentioned, data was collected at different points in time. My cross-sectional research design remedied possible bias. In between the initial diagnostic and the end-of-semester diagnostic, students were assigned 12 additional modules on the NoRedInk platform and asked to respond to two journal prompts that were part of the data included in the study. Students were also invited to participate in one-on-one interviews. My primary interest was information rich cases for an in-depth study.

Table 6

Matrix showing crosswalk of study foci and data collection activities

| Study focus | Journal entries | NoRedInk modules | One-on-One interviews |
|--|-----------------|------------------|-----------------------|
| How do students experience NoRedInk in the context of a community college writing class? | ✓ | ✓ | ✓ |
| Is there a relationship between students' attitudes towards grammar and their performance on the digital platform? | ✓ | ✓ | ✓ |

At the beginning of the study, students were asked to write a journal entry about their prior experiences with grammar instruction. This was the impetus for a whole-class discussion on NoRedInk. I explained that NoRedInk was a digital grammar tool that we would be using in class. Once a week, my students and I met in a computer lab instead of our assigned classroom. During these meetings, students spent approximately 20-30 minutes completing modules and quizzes on the NoRedInk platform. After students completed the required modules, they were encouraged to explore the learning pathways and choose lessons, on their own. Students were asked to choose pathways based on their need to advance their understanding of certain skills in grammar, usage, mechanics and style. NoRedInk has over 50 learning pathways with a fully scaffolded scope-and-sequence on over 500 topics (Note: not all pathways are available with NoRedInk Free. NoRedInk Premium must be purchased in order to gain access to all pathways.). In order to plan the most appropriate instruction, I consulted three different sources to compile a list of the most common writing errors.

Planning the Schedule for Modules on NoRedInk

First, I had to decide how to incorporate elements from the NoRedInk grammar instruction platform in the context of my classes. To do this, I reviewed the literature to help me make an informed choice. Many authors have compiled lists of the most common sentence errors. For example, in 1988, Robert Connors and Andrea Lunsford analyzed the frequency of errors in 3,000 college composition papers and came up with a list of the top 20 kinds of errors (“Frequency of formal errors in current college writing, or Ma and Pa Kettle do research”). I cross-referenced this list with the chapter 34 in *The Longman Handbook* (1997), and three seminal error lists (Johnson, 1917; Witty and Green, 1930; and Hodges, late 1930s) in order to compile an up-to-date list of errors that are considered serious.

| Error or Error Pattern | # in 300 Papers |
|---|-----------------|
| Spelling | 450 |
| No comma after introductory element | 138 |
| Comma splice | 124 |
| Wrong word | 102 |
| Lack of possessive apostrophe | 99 |
| Vague pronoun reference | 90 |
| No comma in compound sentence | 87 |
| Pronoun agreement | 83 |
| Sentence fragment | 82 |
| No comma in non-restrictive phrase | 75 |
| Subject-verb agreement | 59 |
| Unnecessary comma with restrictive phrase | 50 |
| Unnecessary words/style rewrite | 49 |
| Wrong tense | 46 |
| Dangling or misplaced modifier | 42 |
| Run-on sentence | 39 |
| Wrong or missing preposition | 38 |
| Lack of comma in series | 35 |
| Its/it's error | 34 |

Figure 32. Connors and Lunsford's list of the top 20 grammar errors.

Ten Serious Grammar Mistakes

1. **Fragment** (34a and 40a–b)
The heavy rain turned the parking lot to mud. **And stranded thousands of cars.**
2. **Fused Sentence** (34b and 41a–b)
The promoters called **the insurance company they discovered** their coverage for accidents was limited.
3. **Unclear Pronoun Reference** (34c and 42a)
After talking with the groundskeeper, the security chief said **he** would not be responsible for the safety of the crowd.
4. **Lack of Subject-Verb Agreement** (34d and 38a–b)
Away from the microphone, the mayor said, "I hope the security chief or the promoters **has** a plan to help everyone leave safely."
5. **Dangling Modifier** (34e and 43b)
After announcing the cancellation from the stage, the crowd began complaining to the promoters.
6. **Shift** (34f and 44a–d)
If **people** left the arena quickly, **you** could get to **your** car without standing in the rain.
7. **Misused or Missing Apostrophe** (34g and 53a–b)
Even the **promoters promise** to reschedule and honor **ticket's** did little to stop the crowd's complaints.
8. **Unnecessary Commas** (34h and 51j)
Although, the muddy lot caused problems, all the cars and **people, began** to leave.
9. **Missing or Misused Quotation Marks** (34i and 54a–c)
The grounds are **slippery, the** mayor repeated, "so please walk carefully."
10. **Double Negative** (34j and 39d)
The authorities were relieved because they **hadn't scarcely** enough resources to cope.

Figure 33. *The Longman Handbook*, Chapter 34, "Ten Serious Grammar Mistakes"

| Johnson (1917) 198 papers | Witty & Green (1930) 170 timed papers | Hodges (late 1930s) 20,000 papers |
|--|--|--------------------------------------|
| Spelling | Faulty connectives | Comma |
| Capitalization | Vague pronoun reference | Spelling |
| Punctuation (mostly comma errors) | Use of “would” for simple past tense forms | Exactness |
| Careless omission or repetition | Confusion of forms from similarity of sound or meaning | Agreement |
| Apostrophe errors | Misplaced modifiers | Superfluous commas |
| Pronoun agreement | Pronoun agreement | Reference of pronouns |
| Verb tense errors and agreement | Fragments | Apostrophe |
| Ungrammatical sentence structure (fragments and run-ons) | Unclassified errors | Omission of words |
| Mistakes in the use of adjectives and adverbs | Dangling modifiers | Wordiness |
| Mistakes in the use of prepositions and conjunctions | Wrong tense | Good use |

Figure 34. Seminal Error Lists.

After I examined each source, I cross-referenced the data to compile a list of concepts that I would focus upon to plan activities and lessons on the NoRedInk platform. I created the original planning diagnostic from this summative list. Table 7 shows the semester schedule that I developed for my classes.

Table 7

Semester schedule

| | |
|--------|--|
| Week 1 | Journal entry: What does “grammar” mean to you? Reflect upon and write about your experiences with grammar. Introduction to the NoRedInk platform and discussion about meeting in the computer lab 1x week during class time |
| Week 2 | Planning diagnostic: plural vs. possessive nouns, verb tense I: simple tenses, punctuation with conjunctions: coordinating (FANBOYS), prepositional phrases, identifying sentences and fragments, commas for clarity, commonly confused words I, |

| | |
|---------|--|
| | connecting clauses with colons and semicolons, subject-verb agreement I, misplaced and dangling modifiers, phrases and dependent clauses. |
| Week 3 | Unit diagnostic: misplaced and dangling modifiers |
| Week 4 | Unit diagnostic: commas for formatting and commas for clarity |
| Week 5 | Planning diagnostic: singular vs. plural possessives, prepositional phrases, restrictive and nonrestrictive clause, commonly confused words I, and punctuation with conjunctions |
| Week 6 | Quiz: FANBOYS and introductory phrases and clauses; punctuation with conjunctions: all, phrases and dependent clauses <u>and</u> Quiz: Contractions and MLA (Contractions, Commonly Confused Words, I, MLA Citation I) |
| Week 7 | Growth quiz: Modifier Growth (Misplaced and Dangling Modifiers) |
| Week 8 | Quiz: Comma Splices/Fused Sentences (Building Compound and Complex Sentences) and Growth Quiz: Contractions and MLA (Contractions and MLA Citation I) |
| Week 9 | Quiz: Possessives (Plural vs. Possessive Nouns, Singular vs. Plural Possessives) <u>and</u> Quiz: Prepositions (Prepositional Phrases) |
| Week 10 | Quiz growth—Retake: comma splices (Building Compound and Complex Sentences) |
| Week 11 | Quiz: Pronouns (Pronouns-Antecedent Agreement, Vague Pronouns, Pronoun Case) <u>and</u> Quiz on Tenses (Verb Tense I: Simple Tenses, Verb Tense II: Perfect and Progressive Tenses) |
| Week 12 | Growth quiz: Possessives Growth (Plural vs. Possessive Nouns, Singular vs. Plural Possessives) <u>and</u> Growth Quiz: Prepositional Growth (Prepositional Phrases) |

| | |
|---------|---|
| Week 13 | Growth quiz: Pronoun Growth (Pronoun-Antecedent Agreement, Vague Pronouns, Pronoun Case) |
| Week 14 | <p>End-of-the-Semester Journal:</p> <ol style="list-style-type: none"> 1. What is grammar? Has your understanding of grammar changed since the beginning of the semester? If so, how? 2. How would you describe your attitude towards grammar? 3. What was your overall experience using NoRedInk? 4. Do you think that using NoRedInk helped you improve your writing (i.e. did you see improvements in the essays you wrote?) over the course of the semester? If not, why? If so, how? 5. What new grammatical concepts did you learn this semester? Which ones were you unfamiliar with before using NoRedInk? 6. Did you find NoRedInk to be annoying, enjoyable, helpful (or something else)? Please explain why. <p>Growth quiz: Tense growth (Verb Tense I: Simple Tenses, Verb Tense II: Perfect and Progressive Tenses)</p> |
| Week 15 | Diagnostic—Semester end: Plural vs. Possessive Nouns, Verb Tense I: Simple Tenses, Punctuation with Conjunctions: Coordinating (FANBOYS), Prepositional Phrases, Identifying Sentences and Fragments, Commas for Clarity, Commonly Confused Words I, Connecting Clauses with Colons and Semicolons, Subject-Verb Agreement I, Misplaced and Dangling Modifiers, Phrases and Dependent Clauses |

Choosing Concepts for the Initial Diagnostic

At the start of the semester, I assigned my students an initial diagnostic in NoRedInk. I wanted to be able to see my students’ growth over the course of the semester, so I assigned them an initial diagnostic, as well as an end-of-semester diagnostic. In order to choose topics, I looked at several seminal error lists. I revisited Connor and Lunsford’s (1988) essay, “Frequency of Formal Errors in Current College

Writing,” in which they list the top twenty error patterns; and Anson and Schwegler’s *The Longman Handbook for Writers and Readers*. When comparing Connor and Lunsford’s list of common errors to the list, “Ten Serious Grammar Mistakes,” in *The Longman Handbook*, I found many parallels (see chapter 4). Both sources listed (as serious mistakes): fragment, fused sentence [Connors and Lunsford refer to fused sentences as run-on sentences], unclear/vague pronoun reference, lack of subject-verb agreement, dangling modifier, shift (pronoun shift, tense shift, pronoun agreement), misused or missing apostrophe, and unnecessary commas. Once I synthesized these two sources, I consulted error lists from the early 1900s (Johnson 1917, Witty & Green, 1930, and Hodges, late 1930s). Synthesizing the error lists permitted me to compile a list of the most current errors. Connor and Lunsford’s list, for example, was generated almost three decades ago, so some of the errors listed (i.e. spelling errors) are no longer as frequently made because most student work is typed using software like Microsoft Word. The same holds true for several errors on the lists from the early 1900s.

After my students completed the initial diagnostic, I reviewed all of their scores to determine the areas with which they struggled the most. With this knowledge, I was able to assign specific lessons and create quizzes for my students to practice their knowledge of certain grammatical, mechanical, and punctuation rules. Throughout the semester, I assigned practice, quizzes, and retakes on errors that I identified as most important for the class, as a whole. Some weeks, my students and I would review that concept on which they would be assessed. I projected the lesson on NoRedInk on the overhead, and we went over it as a class. This gave students an opportunity to ask for

clarification and provided an opportunity to examine sentences as a class. I found this reinforcement to be beneficial.

Data Collection Methods

The nature of my research questions lent itself to a mixed methods approach. I employed both quantitative and qualitative methods for this study. The qualitative methods included journal writing and on-one-one, audio-recorded interviews. The quantitative method I used involved the utility of the online platform, NoRedInk. At the beginning of the semester, I asked students to define “grammar” and write a journal entry about their previous experiences with grammar instruction. Throughout the semester, students were asked to complete unit diagnostics, lessons, practice exercises, and quizzes on NoRedInk. Both of my composition classes were given the same unit diagnostics at the same time. In addition to the activities on NoRedInk, students were invited to participate in one-on-one interviews with me about their previous experiences with grammar instruction, the preexisting attitudes they may have held about grammar instruction, and their reaction to NoRedInk. My last data set was a journal entry asking students to define grammar [to see if their definitions of grammar changed from the beginning of the semester], to describe their attitude towards grammar and grammar instruction, and to reflect upon their overall experience using NoRedInk.

While students were working on NoRedInk, in class, I would walk around the lab, asking students questions about their progress and opinions of the program. Sometimes, students found awkward sentences that they would share with me. I took a photo of the computer screen, and we had a brief conversation about why they felt

the sentence was problematic. For example, Mustapha chose Pokémon as one of his interests when setting up his account on NoRedInk. The student saw the verb as logistically impossible and the sentence semantically incoherent because he had background knowledge about the actor. Because Charmander is a fire flying type Pokémon from the Generation I of *Pokémon*, this character cannot possibly like “splashing in the ocean.” Another student encountered a word which they were not familiar. This student had chosen golf as an interest when she initially created her account on NoRedInk. The sentence on NoRedInk used the word, “bye,” as a term used in golf tournaments. She shared her confusion of the word’s usage, stating that she had only heard of “by,” “buy,” and “bye” [a conventional expression used at parting]. She had never heard the word used as a golf term.

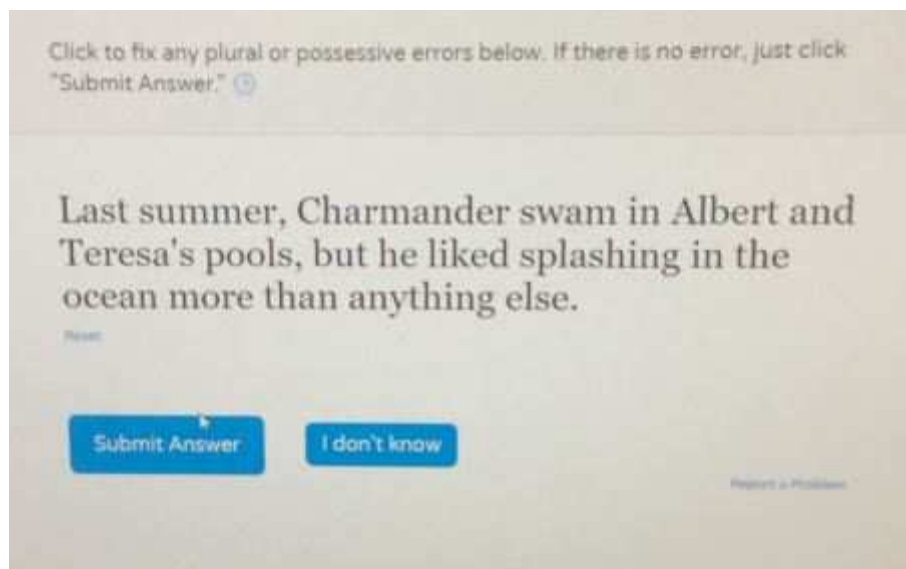


Figure 35. Sample sentence from NoRedInk (plural and possessive errors).

Summarization of Data Sources

Using different sources and methods in the evaluation process allows for building on the strength of each type of data collection and minimizing the weaknesses of any

single approach. I decided upon a multi-method approach which can increase both the validity and the reliability of evaluation data. I have three types of data sources. Each has strengths and limitations.

My students’ journal entries are a valuable first-hand account of their prior experience with grammar instruction. They gave me a better understanding of my students’ history with grammar instruction. I read through the journal essays and color coded them, so the themes were recognizable. This document analysis was used in combination with other qualitative research methods as a means of triangulation—“the combination of methodologies in the study of the same phenomenon” (Denzin, 1970, p. 291).

Table 8

Initial coding of a student’s journal entry defining “grammar.”

| Initial Journal Prompt | Student’s Journal Entry | Coding |
|---|---|--|
| <p>What does “grammar” mean to you? Reflect upon and write about your experiences with grammar.</p> | <p>Grammar is a set of rules applied to the english [sic] language to assure that others will be able to understand. By having grammer, [sic] we are able to effectively communicate with no misinterpretation. Grammer [sic] is spelling, punctuation, and sentence structure. It gives a writer an outline of how our language works.</p> | <p>rules language understand effectively communicate punctuation structure</p> |

A very desirable strategy in qualitative data collection is capturing respondents' perceptions in their own words. Through the questions I asked of my interviewees, I sought to elicit free and open responses. The interviews added new information about my students' perceptions of the relevance of grammar instruction and its relevance to their future careers and upward mobility. Many student also spoke about influences affecting the next generation. The use of interviews as a data collection method begins with the assumption that the participants' perspectives are meaningful, knowable, and can be made explicit. There is a tradeoff between comprehensive coverage of topics and in-depth exploration of a more limited set of questions. Although I chose to use a list of questions to guide the interview, I hoped the questions would be used as talking points to induce students to talk about memories specific to their past experiences.

Advantages and Disadvantages of Interviews Conducted by Instructor

Advantages:

- Usually yields richest data, details, new insights
- Permit Face-to-face contact with respondents
- Provide opportunity to explore topics in depth
- Allow interviewer to experience the affective as well as cognitive aspects of responses
- Allow interviewer to explain and clarify questions, increasing the likelihood of useful responses

Disadvantages:

- Time-consuming
- There was a risk that the interviewee may distort information through recall error, selective perceptions, desire to please interviewer
- Flexibility can result in inconsistencies across interviews
- Volume of information can be large; may be difficult to transcribe and reduce data

Figure 36. The advantages and disadvantages of interviews.

My third data source was my students' performance on the NoRedInk platform. NoRedInk codes students based on their performance on the modules. After completing the initial diagnostic, students are placed into learning pathways, based on the proficiency that they show. For example, there are fifteen active/passive voice sub-categories on the site. If a student who has shown that they already have fundamental knowledge of active/passive voice logs into the site, she would start further down that learning pathway than her classmates who were struggling.

The performance bands are as follows: below basic, purple; basic, pink; proficient, blue; and advanced, green. One approach to my data analysis was to conduct case studies of students from each performance band. Assessments, like those offered on NoRedInk, provide a way to assess subjects' knowledge and capacity to apply this knowledge to new situations. Tests provide information that is measured against a variety of standards: how the performance of one student compares to another (may say nothing adequate about performance); determine whether or not a student has attained mastery of a skill or knowledge area (criterion-referenced assessments provide data on whether skills have been reached, but far less about a student's standing relative to his or her peers); proficiency testing provides an assessment against a level of skill attainment. I used these tests to gather information on the status of knowledge and the change in status of knowledge over the course of a semester. The advantages and disadvantages of tests depend largely on the type of test being considered and the personal opinion of the stakeholder.

| Advantages and Disadvantages of Tests |
|---|
| <p>Advantages:</p> <ul style="list-style-type: none"> • Provide objective information on what the test taker knows and can do • Can be constructed to match a given curriculum or set of skills • Can be scored in a straightforward manner • Are accepted by the public as a credible indicator of learning <p>Disadvantages:</p> <ul style="list-style-type: none"> • May be oversimplified and superficial • May be biased against some groups of test takers • May be subject to corruption via coaching or cheating |

Figure 37. The advantages and disadvantages of tests.

The multimethod approach that I used increased both the validity and the reliability of my evaluation data (Creswell et al 2003; Patton, 2001; Denizen, 1970). “The emergence of mixed methods as a third methodological movement in the social and behavioral sciences began during the 1980’s” (Tashakkori and Teddlie, 2003, p. 697).

My study integrated qualitative and quantitative approaches to generate new knowledge. I used a triangulative model, as I collected data at the same time and integrated it all to answer my research questions. The deficiencies in one method were overcome by combining the two approaches. The open ended responses that I received during the one-on-one interviews were very beneficial to my study. As one researcher puts it, “Open ended responses permit one to understand the world as seen by the respondents. This enables the researcher to capture the points of view of other people

without pre-determining those points of view” (Patton, 2002, p. 21). I was very interested in my students’ thoughts and attitudes, as I knew it would supplement the information they shared in their journal entries. In many cases, students who volunteered to participate in the one-on-one interviews explained, in much greater depth, some of their thoughts and attitudes initially shared in their journal entries. The NoRedInk platform, the instrument used, is stable. However, extraneous influences (e.g. tiredness, motivation) could have led to differences in my students’ responses. One can never be one-hundred percent confident that quizzes and diagnostics are actually measuring what they were intended to measure.

In regard to my qualitative research, I sought to understand my students attitudes towards grammar instruction. The aim of my qualitative research was to “engage in research that probes for deeper understanding rather than examining surface features” (Johnson, 1995, p. 4). I utilized triangulation to control bias. Patton (2001) advocates the use of triangulation by stating, “triangulation strengthens a study by combining methods. This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches” (p. 247). The variation in my data collection led to greater validity. I was able to answer my research questions from a number of perspectives by using student journal writing, one-on-one interviews, and data from the NoRedInk platform. This is a strong mixed methods study because I have three sources of data. As a teacher-researcher, I have an inherent tension between my pedagogical goals and my research goals; however, this study allowed me to bring these together in ways that benefitted my students.

CHAPTER 5

STUDENTS RESPOND TO NOREDINK

In the next two chapters, I am going to share the following five findings: (1) students liked NoRedInk; (2) almost all students experienced growth in grammar knowledge as a result of using NoRedInk. First, I address my first research question: How do students experience NoRedInk in the context of a community college writing class? I offer a series of case studies of specific students in order to look more closely at how students experience NoRedInk in the context of my classes. Then, I review students' attitudes about grammar, discovering four key themes that are present as they reveal their beliefs and previous experiences with grammar instruction in the context of English and composition education. I couldn't address this question through statistical tests because almost all of my students' pre-existing attitudes towards grammar were negative.

In order to effectively analyze the quantitative data from NoRedInk, I exported the data to Excel to create charts and tables to summarize and organize my data. NoRedInk uses different colors to organize students into one of four performance bands. The levels are coded as follows: below basic, purple; basic, pink; proficient, blue; and advanced, green. I decided it would be beneficial to take a granular look at three individual students, one from each performance band. None of my participants were labeled as "advanced." Three of my students were labeled as below basic

(purple), six students were labeled as basic (pink), and eight were labeled as proficient (blue). These labels are based upon student scores on the modules and quizzes; scores on the diagnostics are not figured into this average.

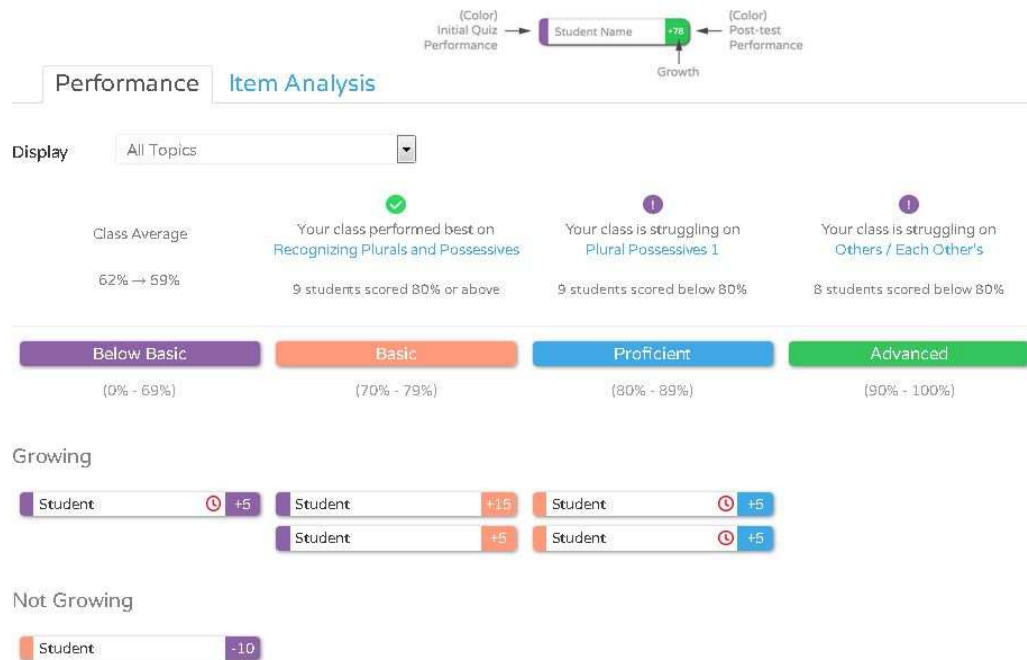


Figure 38. Performance bands on the NoRedInk platform.

My Students' Performance on NoRedInk

In this section, I will be discussing the concepts which my students struggled with the most, as well as performance on the initial and end-of-semester diagnostics. On the modules completed throughout the semester, my students struggled most on modifiers (62%), possessives (64%), and prepositions (66%). If you look at the performance of both my courses, you can see that my students struggled most with connecting clauses with colons and semicolons. Thirty-two percent of my students struggled with this concept.

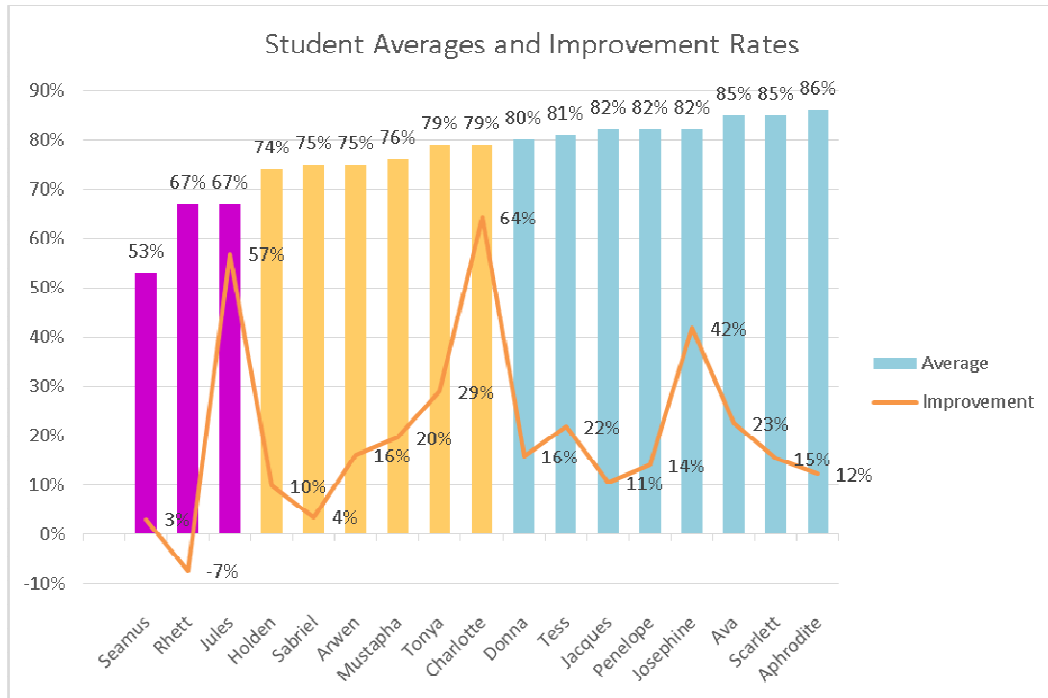


Figure 39. Students’ growth from the initial diagnostic to the end-of-semester diagnostic.

Only one student, Rhett, did not show growth at the end of the semester. Rhett’s average from the initial diagnostic to the end-of-semester diagnostic decreased by 7% (his score dropped by 4 points). The improvement of the remaining 16 students ranged from 3% to 64%. The averages of the three students labeled as below basic, Seamus, Rhett, and Jules, as follows: 53%, 67%, and 67%, respectively. Seamus, who had the lowest average, improved by 3%; Rhett, who had the least improvement, dropped by 7%; and Jules, whose average was 67% (the same as Rhett), improved by an impressive 57%.

On the final diagnostic, students showed great improvement with connecting clauses with colons and semicolons; and punctuation with conjunctions. Table – shows the performance of students, from one of my classes, on the final diagnostic.

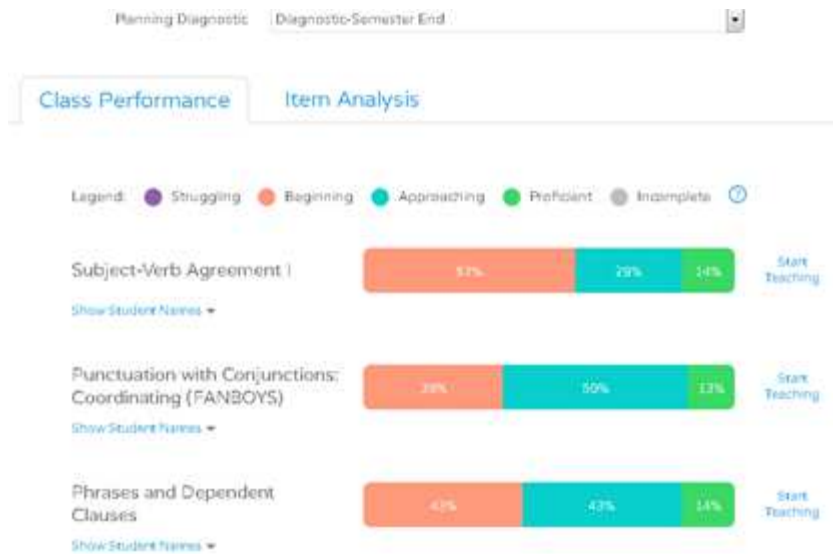


Figure 40. Student performance on the end-of-semester diagnostic.

Comparing the initial diagnostic to the end-of-semester diagnostic indicates an increase in student performance with prepositional phrases, verb tense, and subject-verb agreement. This improvement shows that the modules and lessons on NoRedInk did increase students' knowledge of these concepts.

Finding 1: Students Had Positive Reactions to the NoRedInk Platform.

After using NoRedInk for the first time, I asked students to reflect upon how they felt about the digital platform by completing an in-class journal response. When asked to share their first impressions of NoRedInk, students' responses were varied but most students shared that they liked the program. Students addressed several elements, including: the pop culture element, its ease of use, and perceived benefits.

Several of my students remarked on the pop culture element of the program. Tess said, "after using NoRedInk for the first time, I think it is a really good tool for students to practice their grammar [sic]. In the beginning you choose all the topics you are familiar with [pop culture element] so you know and can personally connect with

each of the sentences.” Josephine mentioned the pop culture element of NoRedInk, stating:

I thought that NoRedInk was an interesting idea for testing grammar knowledge. Selecting the different interests made it a little more fun, some of the sentences placed people in hilarious places doing silly things. It was definitely a more personable approach to testing. It made me realize how little I know about grammar [sic]. I like how it sets up what areas I am stronger in all the way down to where I need help. It was easy to use and easy to navigate through the website. I realized I don’t understand a lot of parts involved with grammar [sic] and now I’m interested in learning how to correct that.

Aphrodite, Jordan, Arwen, and Attius shared their liking the pop culture element. Aphrodite stated, “I really enjoyed adding my interests. Sometimes English can get pretty boring (sorry!) [sic], but incorporating different types of interests really add to the learning experience.” Jordan said, “It was interesting that you could select your interests and it would set up questions with your interests in them.” Arwen agreed, writing “I like NoRedInk a lot! It is cool that it uses your interests in the sentences. My favorite part is that they use my pets [sic] names in sentences. It is a cool way to learn grammar.” Atticus said, “It was interesting how the website took what you were interested in and turned it into a grammar [sic] exercise.” Billy, however, didn’t think the pop culture element was necessary. He stated, “Personally I enjoyed the program. The pulling in of people from my interests seemed irrelevant in my opinion.” Holder agreed with Winston, stating, “I do not like using NoRedInk. I feel as though it tries too hard to fit in with modern culture, and I personally prefer the old way of doing

grammar. Also, the website feels as though it was built to fit high and middle schoolers.”

Pete, Jordan, and Atticus found the program to be user friendly. Pete said, “I’m comfortable with using the program. It isn’t confusing or hard to use. When I had difficulty, I didn’t know the information it was asking for. Overall if the program can teach effectively then I’d like it.” Jordan said, “I liked NoRedInk because of the easy-to-use format.” Atticus wrote, “I think the website was very easy to use, and effective presenting grammar questions. I hate grammer [sic], but using this website was not too bad.” Donna and Sophia thought that the site was a little confusing. Donna said, “I barely got a chance to use NoRedInk but when I did, I thought it was very confusing and I wasn’t really sure what to do when I first logged on. Overall though I think it’s a good way to test someone’s grammar and sentence skills.” Sophia agreed that it was initially confusing, but shared, “once I realized what I had to do it became easier. I like being able to pick what goes into the sentences, it makes it funny. The learning part teaches very well.”

After using the program once, students could already recognize areas in which they needed practice. Charlotte acknowledged benefits, stating, “Using NoRedInk made me realize that I have a lot to learn about grammar. I’m good at spelling this correctly, but I struggle with prepositions and comma splices. My score was really bad. I may have rushed some of my answers. NoRedInk is a really good website.” Atticus shared Charlotte’s feelings, stating, “I know that I definitely need a ton of work when it comes to grammer [sic].” Rhett said, “After using NoRedInk I felt as if it would be helpful to a person who is trying to sharpen up on their grammar, as well as

comma placement. NRI can make a change in a person's writing skills." Ava echoed Rhett's response about the perceived benefits of NoRedInk. Ava wrote:

I thought NoRedInk was a helpful tool for students to use. It provided questions that the students could relate too [sic]. A difficult thing for me, [sic] was all of the different types [grammatical terms] it was asking about i.e. "prepositional phrase" and others like that. I got the feeling that I was supposed to know those, and I didn't which was a difficult thing. But other than that, I felt like the website could be very helpful for students to learn from.

Tonya shared, "I thought it [NoRedInk] was helpful in regards to identifying what content in your work that [sic] could be revised to ensure that your writing is a complete and original thought, not anyone else's. It also adds a bit of challenge, as you may have to change a part in your writing that you didn't think was necessary to change." Hester agreed with Tonya that NoRedInk is stimulating. She said, "The questions were challenging! Granted, my brain turned to mush pretty fast, [sic] I thought it was a good grammar work." Beatrice's response was mixed. Despite recognizing benefits, she said, "I think that NoRedInk is a good program that made me realize how little I know about grammar [sic], but I hope we don't spend too much time on it." Jake said "the website, NoRedInk, is an interesting site. It showed me what I do and do not know about grammar, punctuation and proper uses of words like their, there, they're. I ended up learning quite a bit just doing the [initial] diagnostic, [sic] until doing the diagnostic I never even heard of FANBOYS [coordinating conjunctions].

Students who volunteered to be interviewed were also asked to share what they liked and/or disliked about the NoRedInk platform. Based on their responses, most students seemed to enjoy using the program and thought it was beneficial. However, a few students shared some aversion, and several students had constructive criticism.

Table 10

Students' reactions to the NoRedInk platform.

| Positive Reactions to the NoRedInk Platform | |
|--|---|
| Themes | Student Comments |
| Perceived Benefits | “NoRedInk has made me understand it [grammar] better. ... if it says to correct something or change it to a possessive pronoun or an adverb, if I didn't know what it was before, I had to learn what it was or they [NoRedInk] wouldn't let me move on.” |
| | “I think I understand grammar more because of NoRedInk.” |
| | “NoRedInk has helped me with punctuation; using commas and stuff has probably been the most helpful thing for me.” |
| | “I learned about prepositional phrases and FANBOYS [acronym for coordinating conjunctions].” |
| | “Since the beginning of the semester, my scores have improved because I now know the definitions of the grammatical terms.” |
| | “I heard many technical grammar terms but to know what they actually were I learned through NoRedInk. For instance misplaced modifiers and that type of thing.” |
| | “NoRedInk has allowed me to remember everything we learned and had forgotten since we got out of middle school.” |

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| | <p>“I could not remember, but seeing it [FANBOYS] on there and working with it again brings back everything. I heard about the acronym before but had completely forgotten about it until I used NoRedInk.”</p> |
| | <p>“It has showed me ways to cut out some of the words and make it into one sentence either with a semicolon or just cutting out stuff that I don’t need.”</p> |
| | <p>“NoRedInk helped me to improve my English, ... it progressively got harder; it would test you on things that were not common knowledge so you would have to try harder.”</p> |
| | <p>“I learned stuff I didn’t know before; I got a lot out of it, and I find I will be using what I got out of it throughout my education [sic] career.”</p> |
| <p>Pop Culture Element</p> | <p>“I like that you can pick what you want your topics to be about [referring to the pop culture element of the program]. It makes it interesting. And I like that when you get something wrong it shows you why it was wrong and lets you try another problem.”</p> |
| | <p>“They incorporated the student’s interests with each question it asked, it made it more personal and helped with the understanding of the questions it was asking. It made it more interactive and engaging for me. When I saw familiar names that they used I found myself paying attention more.”</p> |
| | <p>“The pop culture element made it fun and entertaining, rather than a 1920 grammar book.”</p> |
| | <p>“It was more interesting going through the exercises because of the pop culture element. It brought in people that I knew of rather than random names.”</p> |

| | |
|---|---|
| | <p>“The pop culture element was cool, and the ones where I put my name in it was pretty weird. It was more relatable.”</p> |
| | <p>“The examples that NoRedInk gives can be kind of funny or cute. It is cool that we can pick things that relate to what you [sic] like. It is an easy way to make you want to make changes.”</p> |
| <p>Specific Features of the Program</p> | <p>“With punctuation, you can take out punctuation marks or add them anywhere in the sentence. That is kind of cool.”</p> |
| | <p>“NoRedInk is interactive.”</p> |
| | <p>“I like the variety of questions on NoRedInk.”</p> |
| | <p>“I like that it is at a personal pace. I can sit there and read it [the sentences on NoRedInk] as long as I need to read it, so I can actually absorb the material.”</p> |
| | <p>“It gives you a lot of options to choose from.”</p> |
| | <p>“It teaches you a lot, but it is really smooth.”</p> |
| | <p>“Each question is different. I like the variety. ... Sometimes when you see something a different way, it triggers your memory and you are able to figure it out.”</p> |
| | <p>“I like how NoRedInk has all of the categories and subcategories for everything, so if you know a rough category, you can go into that and you can either do the entire category itself or bits and pieces of it as a start.”</p> |
| | <p>“The print of the quiz was big and made it not look like so much work, being one question at a time.”</p> |
| | <p>“I found myself paying more attention to grammar, and I like the way the program is set up. There was a quick review and a group of questions to show that you learned what you read. For instance, if it was going over verb structure it would show you where the verb was, how to identify it, and would have you fix the verb to agree with the verb tense. I completed the lessons before I did the quizzes</p> |

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| | even though they were not assigned.” |
| Practice and Review | “After finishing a quiz, it goes back through the questions that you got wrong and if you get it wrong again, it will keep prompting you until you get it right.” |
| | “There are so many things to review. They give you so many options and the freedom to do them whenever you want.” |
| | “I think it is helpful in how you do not just jump right into it. It gives you some practice problems and tells you if you are right or wrong. It shows you why you thought it was the right answer and then you can move onto another one.” |
| | “NoRedInk shows you the ones you didn’t do correctly and then gives you chances to change your mistakes.” |
| | “It doesn’t just tell you you’re wrong it gives you an example of why it is wrong.” |
| | “Even though I got a score in the 70’s I feel that I have improved in writing and grammar in multiple topics in grammar. I did better the second time around with the retakes.” |
| | “It is beneficial that you are shown what you did wrong and the correct way to approach a problem and you are given several more sentences with similar problems to show that you really get it.” |
| | “I like a lot how it reminds you and goes over what you learned at one point and then reminds [sic] you of it and if you had any misinterpretations you can clear it up right away because there are lessons for you to try out.” |
| | “When I was working with fragments and comma splices, NoRedInk explained different ways to make it better and fix it.” |
| | “I like how its trial and error, and as soon as you do make a mistake they show you so you can go back to it and fix it and that’s kind of |

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| | the best way to learn.” |
| | “It had lessons to go over before you took the quizzes.” |
| | “I like that when you took a quiz you could go back and it would show you and let you correct what you did wrong. If you are doing something and not learning from your mistakes then there is no point to it. You’re not going to get better at it.” |
| | “I liked how when you got a question wrong it would bring you back and make you see why you got it wrong. The pop up box was helpful.” |
| | “NoRedInk almost tricks you into learning it [grammar]. . . . it shows you the same types of examples but it makes you figure it out through a process that doesn’t feel like—I am not sure how to explain it. Sorry. The fact that it is repetitive is helpful.” |
| | “The suggestions help me too because sometimes I might not have been able to pull it up on my own, but because I can go through and try each sentence with different words, it is helpful.” |
| | “I like how when you go through it the first time, it does not tell you what you got wrong . . . but then it shows you. And if you are still having issues understanding why you got it right or wrong, it will bring up a mini menu to show you and give you examples of it.” |
| | “The pop up boxes were helpful because they would tell you what you did wrong and what correct answer was, and how to get there.” |
| | “The pop-up boxes help you see why you’re thinking what you are thinking, and why it is different and it shows you the exact words that make it different. I think that you should keep using NoRedInk in class.” |

| | |
|---------------------|--|
| Ease of Use | “The use of the program was easy; it showed your options clearly.” |
| | “I think that NoRedInk is something that can easily be done on your own time. If I have questions in other classes, I can always go back to it [NoRedInk].” |
| | “I liked that it was supplementary to the class, and you could do it at your own pace.” |
| | “It was set up simply, it would tell you exactly what it was looking for. At the end of the quiz it would show you what questions you got wrong and then it would show you a pop up telling you why it was wrong and how to fix it.” |
| | “It’s like hands on and fun, not like sitting there with paperwork that the teacher handed us. They handed out papers and expected you to learn, this is hands on and you learn at your own pace.” |
| Adaptive Curriculum | “If you are not struggling it will not drag me [sic] through the instruction. Everyone has strong and weak suits in grammar and on NoRedInk you get to shine when you get it and it teaches you when you don’t.” |
| | “I liked that you could go at your own speed; in [traditional grammar instruction] class, if people didn’t get it you had to drag to get through it.” |

Very few students shared negative reactions to the NoRedInk platform. Students’ negative reactions were limited to the pop culture element of the program, grammatical terms, explanations of concepts, and one student’s suggestion that NoRedInk add an audio component.

Table 11

Students' Negative Reactions to the NoRedInk Platform

| Negative Reactions to the NoRedInk Platform |
|--|
| “So like NoRedInk, one of the problems I have with it is that it tries too hard to associate itself with the person it’s trying to teach [referring to the pop culture element].” |
| “The examples that they give should also have your interests in them. The examples are just generic examples or explanations of Pete and Bill; none of them had to do with your characters.” |
| “I don’t like that it starts you off, I feel like—maybe because I never learned the stuff before—asking you to click on the “a word,” and I had to Google the word [grammatical term] because I did not know what it was. I think that it should tell you if you got a questions wrong, right after you do it, instead of making you wait until the end. ... it asks me to name an adverb and I do not know what it is.” |
| “Sometimes the way they explained things could be a little confusing, with multiple examples.” |
| “I would like it if there was a quick overview before you started a test—an alternative to the lesson to make it more streamlined.” |
| “If NoRedInk added an audio component, I think it would be helpful. For example, after you answer a question wrong, a pop-up box appears. If the information in this pop-up was read aloud and did not allow you to click through, if you have to sit there and listen, it would be helpful.” |

Several students commented on the context of the sentences on NoRedInk.

Mustapha explained, in depth:

they should focus more on just a basic format, inserting words and interests from the topics that you chose at the beginning [the pop culture element]. To improve this, they should make references to what they actually did. For example, instead of Charizard can swim, how about directly referencing the actual Pokémon and its attributes [Charizard is a draconic Pokémon who evolves from Charmander. It is primarily orange with a cream underside from the chest to the tip of its tail, which

burns with a sizable flame.]. This would show that they [the designers of NoRedInk] did their research and will enhance the reader's experience. Charizard cannot get wet, so he cannot swim. Making actual references to the games or shows would be better and less generic. I think the content matters. I know this would take a lot more time.

He goes on to say, "that statement [about Charizard] doesn't make any sense [sic] lowers the effectiveness of what you are reading as you are distracted by the inconsistency, and finally, it just shows the developers did not do their basic research on topics." Because his tail is ablaze, Charmander will die if he gets wet. Mustapha's frustration was a result of the fact that the verb makes the sentence logically impossible. To Mustapha, the sentence was semantically incoherent because he has background information about the actor in the sentence. This same student said, "While NoRedInk is effective in testing the basic grammar and spelling, it however, it dumbs it down to [sic] much way below a college level, making it seem like a breeze to people who have been writing for years. . . . Personally, if I were a first grader I would use NoRedInk."

A couple students commented on technical problems with the platform. One student mentioned a glitch, stating, "When I answered a question, it said it was wrong, but it really wasn't."

Finding 2: Almost All Students Experienced Growth in Grammar Knowledge as a Result of Using NoRedInk.

To master a topic on NoRedInk, a student must demonstrate full understanding of that topic. Mastery is not about answering a set number of questions or spending a

certain amount of time. Instead, mastery-based practice builds a tailored set questions to meet each student's needs. Next semester, I might assign more practice, depending on each student's individual needs. For instance, Sabriel took the quiz on modifiers twice and scored poorly both times she took it. She and I discussed the possible reasons why, and she said "I do not know what a modifier is." I asked whether or not she had reviewed the lessons provided by NoRedInk on modifiers, and she said she had but was still unsure of exactly what they were and their function. I explained that, when one struggles with a concept, it is advantageous to look at several different sources for explanation. After this suggestion, I had Sabriel review the chapter in *The Longman Handbook* on modifiers, and I recommended a few sources online. I gave Sabriel a list of credible sites to explore. After revisiting the lessons on NoRedInk, *The Longman Handbook*, and the online sites, I created a retake and Sabriel scored 85%. Upon seeing this significant improvement, I again consulted with Sabriel; When I asked her why she thought her scores improved so significantly, and she revealed, "I now understand the function of a modifier." Although the lessons on NoRedInk seem to be effective, I find that it is often necessary to consult different sources for an explanation of some terms and concepts. Looking at multiple sources allows for several distinctive explanations, so students are more apt to come by an explanation that speaks to them.

Growth Quiz Data

I assigned many growth quizzes over the course of the semester. The growth quiz results page is similar to that of the unit diagnostic. At the top of the page, I can see

my class averages, from the initial unit diagnostic through the growth quiz. I can also see class trends and individual student's growth throughout the unit.

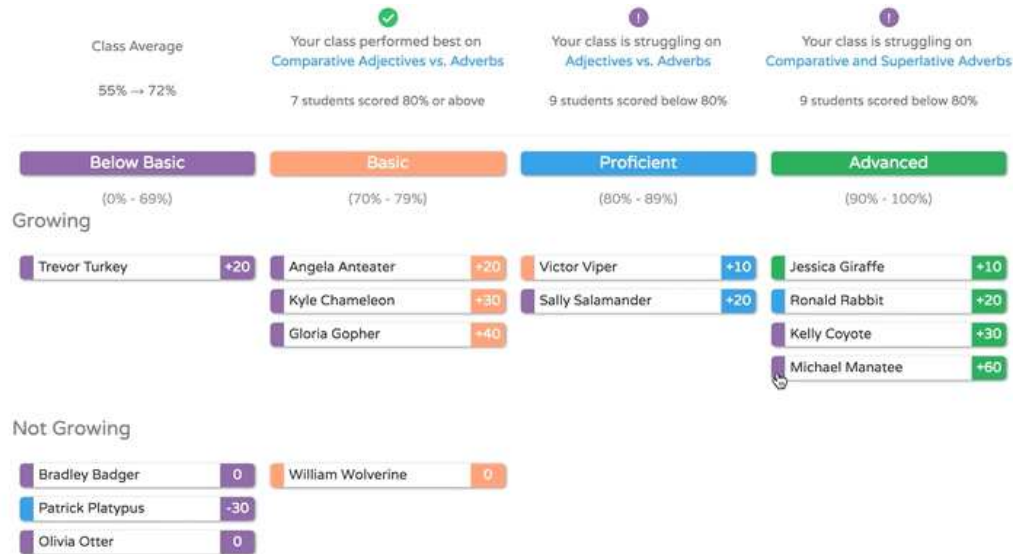


Figure 41. Screenshot of class trends on NoRedInk.

If you look at Michael Manatee, for example, you can see that he started off as below basic (based on the color of his performance band), and he grew 60% throughout this unit. He ended up in the advanced performance band. If you click on his name, you can view all of this data. If you were to take a look at Gloria Gopher, a student in the basic performance band, it is interesting to point out that she started off as below basic. Even though she only grew to the C range, she improved by 40 points throughout the unit. She has plenty of room to grow, but made significant progress from the beginning of the unit.

Writing Specific to the Course

When analyzing student work to see if the knowledge carried over to their writing, the improvement was not as easily determined. I took a granular look at

students from each performance band. This analysis revealed that further analysis is needed to make a determination as to whether or not performance on the NoRedInk modules correlates with students' writing quality. This is beyond the scope of my research project.

CHAPTER 6

GRAMMAR INSTRUCTION AND STUDENT ATTITUDES

In this chapter, I address my second research question: “Is there a relationship between students’ attitudes towards grammar and their performance on the digital platform?” I was unable to completely address this question because almost all of my students’ pre-existing attitudes towards grammar instruction were negative. There was not much variation, so the data did not lend itself to statistical test. As part of my research on the online application, NoRedInk, I asked my students to write journal responses, and I conducted one-on-one interviews in order to learn about their pre-existing attitudes about grammar and procure their input on using the platform.

Case Studies

In order to examine the relationship between student attitudes towards grammar and their performance on the NoRedInk platform, I decided to use case studies of some of my students. While trying to decide upon the students I would study in a more detailed manner, I had a lot of factors to consider. I utilized the performance band function of NoRedInk to help me select cases. Initially, I thought I would just choose one student from each performance band. However, some students had not completed all of the modules, including both the initial and end-of-the-semester diagnostic. In addition, not all students volunteered to participate in a one-on-one interview and I felt that this quantitative data would allow for a more complete representation of my

students. I was eager to analyze the data of three students who had completed both the initial and end-of-semester journal entries; and all of the modules, including both the initial and end-of-semester diagnostic; as well as participated in a one-on-one interview. This proved to be more challenging than I initially thought. Choosing a student labeled as “basic” and “proficient” was fairly easy, as many of my students at both of these levels completed both the initial and end-of-semester journal entries; and all of the modules, including both the initial and end-of-semester diagnostic; as well as participated in a one-on-one interview. None of my students who were labeled as “below basic” had participated in or completed all of the essential activities that I was hoping to analyze. Only three of my students were labeled as “below basic,” so I decided it would be advantageous to examine each of them, rather than try to draw conclusions by looking at one incomplete profile. Doing this would allow me to get a better understanding of how a student in this performance band may perform. In the cases below, I first consider how students experienced NoRedInk in the context of a community college writing class and then I explore the relationship between students’ pre-existing attitudes towards grammar and their performance on the digital platform.

How Students Use NoRedInk

To answer the question, “How do students experience NoRedInk in the context of a community college writing class, I performed a case study of students from each performance band. Case study research is an approach to data reduction that allowed me to see patterns, and integrate qualitative and quantitative research. The case study also gives a visualization of my students’ experiences. Three of my participants, who completed both the initial and end-of-semester diagnostic, scored “below basic.” I had

originally had difficulty deciding which student to analyze because each of these students had failed to complete all of the modules on NoRedInk, and not all three had volunteered to participate in a one-on-one interview. In order to conduct an adequate analysis, I thought it would be most advantageous to look at all three students who were labeled as “below basic” and summarize my findings.

In addition to their two journal responses, scores on NoRedInk, and one-on-one interviews, I wanted to look at each student’s improvement in writing quality over the course of the semester, making note of both their strengths and weakness. In order to do this, I coded essays to evaluate each student’s growth from the beginning of the semester until the end. Students completed four formal writing assignments over the course of the semester. The first essay assigned was a critical analysis, followed by a synthesis, and then a synthesis plus for the third essay. The synthesis plus was different from the synthesis because students were asked to incorporate outside sources. The final writing assignment was a 6-9 page research paper which I introduced in the third week of the 15 week semester. Students were asked to explore topics of interest, and we discussed these ideas in a whole-class discussion. In week nine, students handed in a research proposal. After their topic was approved, students spent the remainder of the semester researching their topic and writing their final paper.

Jules: Experiencing Some Learning Growth

Jules is a quiet, shy student. He always sat in the back corner of the room. He did not say very much. He did not share anything with me about his family or personal life. He is tall and thin with dark hair. Jules overall improvement on the NoRedInk

modules shows retention of information he learned from completing modules on the platform. His score on the initial diagnostic was 44%. Jules correctly answered 24 out of 55 questions. His score on the final diagnostic was 69%. He correctly answered 38 out of 55 questions. His overall improvement was 57%. This was the second highest percentage of improvement, overall [the highest score was a student labeled “proficient,” who improved by 64%]. Jules was labeled as “below basic,” based on his scores on the NoRedInk modules (67 %).

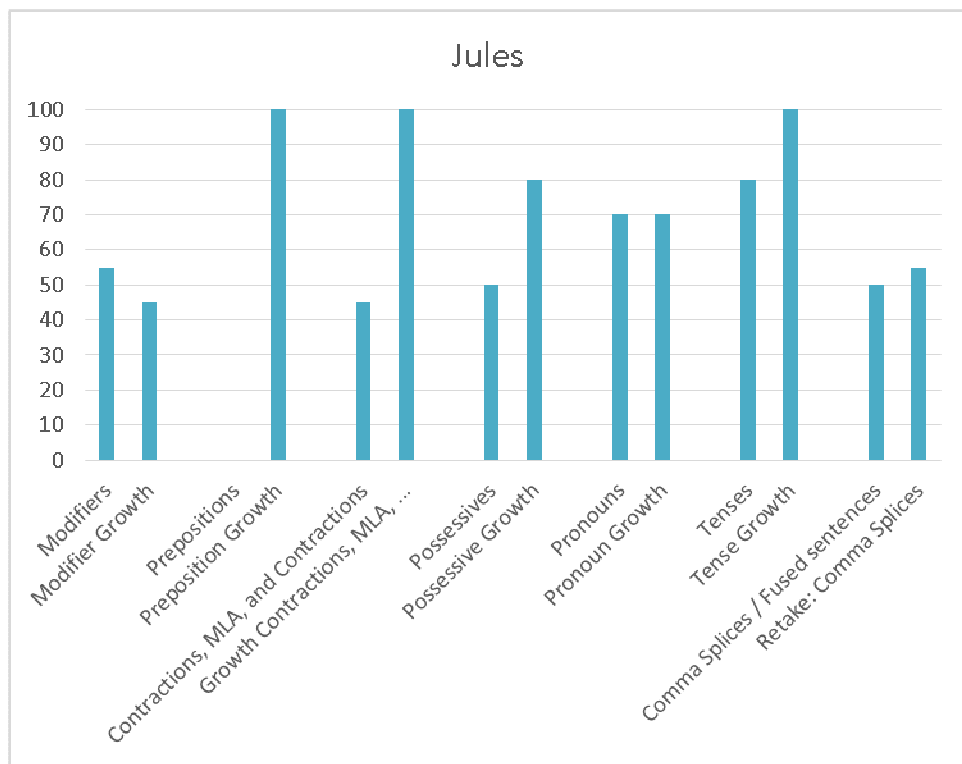


Figure 42. Jules’s quiz scores on the NoRedInk platform.

Looking at Jules’s scores on the completed modules, you can see that his scores consistently increased or stayed the same, except for the modules on modifiers. Jules seems to have a firm grasp on prepositions; although he did not complete the first quiz, he scored 100% on the growth quiz. Jules also made significant improvement on

contractions and Modern Language Association Format (MLA), increasing his score by an impressive 122%. Jules scored 25% better on the tense growth quiz than he did on the initial tense quiz. Jules's knowledge of comma splices and fused sentences improved. Although his knowledge of comma splices only improved by 5%, he made significant gains on fused sentences. He improved by 60% on possessives, but showed no improvement on pronouns [scoring 70 on the initial quiz and on the growth quiz]. Jules scored 18% lower on the modifier growth quiz than on the initial quiz on modifiers.

After noticing a pattern in Jules's scores, I decided to revisit NoRedInk to look at the dates on which he conducted each module. Some students, due to absences or pace, took the quizzes out of order. In some cases, in order to get a true percentage of growth, I had to use the score for the retake as the original score because the student completed the retake before the original quiz. Jules's impressive improvement with MLA format on the NoRedInk platform did not carry over into his writing for the course. Jules's research paper was poorly written. He scored 66%. He did not fulfill all of the necessary requirements for the paper. Jules did not adhere to (MLA format, and he did not use the required number of sources. On essay 1, Jules scored 70%. His main struggles were MLA format (both in-text and on the works cited page), failure to use 3rd person, comma splices, and tense shifts.

Seamus: Non-Participation on the NoRedInk Platform But Adequate Writing Performance

Seamus, a student in his twenties, has a four year old daughter, with whom he has joint custody. He has a full-time job. He is of average build, with short brown hair.

Seamus completed less than half of the assigned modules on NoRedInk. However, his writing performance over the course of the semester did improve. Seamus’s overall improvement was only 3%. He only completed 5 of the 14 quizzes. Because Seamus completed less than half of the modules, his score is incomplete. Seamus was also labeled as “below basic,” based on his scores on the NoRedInk modules (53%). His score on the initial diagnostic was 65%; Seamus correctly answered 36 out of 55 questions. His score on the final diagnostic was 67%; Seamus correctly answered 37 out of 55 questions.

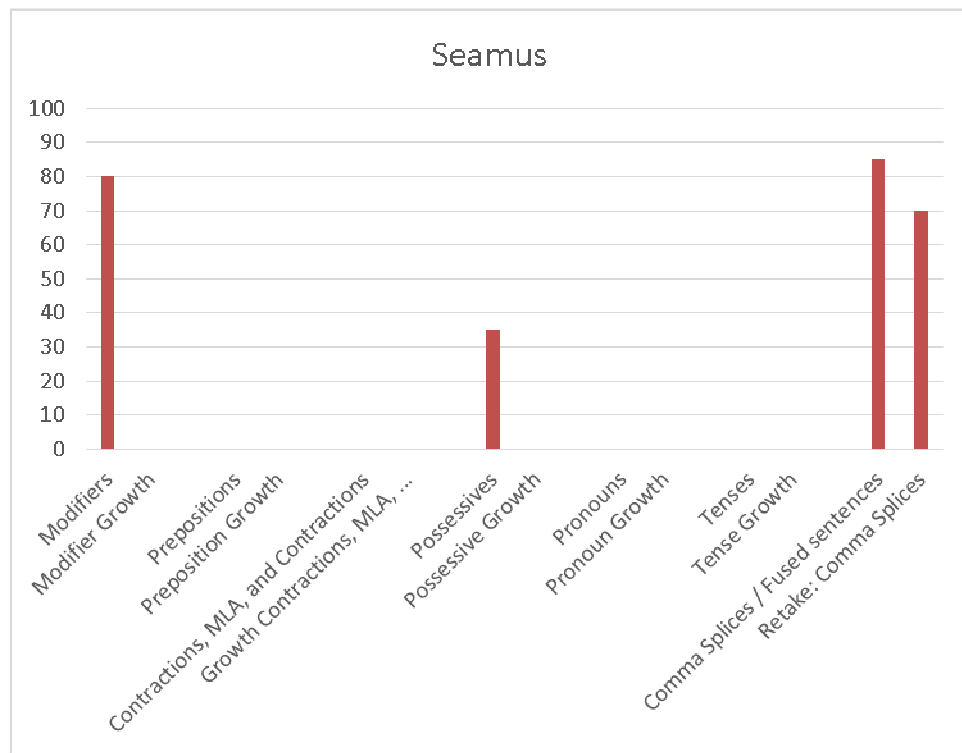


Figure 43. Seamus’s quiz scores on the NoRedInk platform.

Seamus’s first essay was peppered with errors. He earned 70%. The bulk of the mistakes were punctuation errors (missing and misplaced commas), using the wrong point of view, mixing of verb tenses, and effectively incorporating quotes. I also suggested ways for Seamus to strengthen his conclusion. I have always had my

students write multiple drafts of every essay [I average the grades of each draft to give the paper a final grade]. We begin with the “child’s draft” (Ann Lamott from *Bird by Bird*), before starting the rough draft. The “child’s draft” (which is not graded) is an opportunity for students to just write. Once two drafts have been written and peer reviewed, students are assigned to write a final draft.

Seamus scored 65% on the rough draft of his second essay. He showed that he struggled with MLA format, including in-text citations and the works cited page, fragments, commonly confused words, tense, person, formal language, comma placement, and transitions. Seamus’s thesis was well-written, so the first thing we discussed was how to effectively incorporate quotes. We discussed how to introduce the quotation and addressing its significance. I also recommended that Seamus complete a few lessons on NoRedInk to improve his knowledge of comma placement rules and fragments. After meeting with me, one-on-one, to go over several necessary revisions and edits, he turned in a revised draft. His final draft earned him an 80%. Seamus showed that he had a better understanding of how to introduce quotes more smoothly, comma placement, and writing complex sentences.

On essay 3, Seamus’s overall grade was a 78%. He had a strong thesis and his essay flowed well. However, he still struggled with MLA format, both in-text and on the works cited page; using quotes to explain his ideas, and explaining the significance of the quotes. Seamus also needed to work on strengthening his conclusion.

After Seamus finished his rough draft of his research paper and received peer feedback, he and I met, one-on-one, to discuss necessary edits and revisions. Even after writing several drafts, receiving peer review in a writing workshop, and meeting

with me, one-on-one, to discuss possible changes, Seamus's final draft still had errors. His major struggles were with Modern Language Association (MLA) formatting rules (both in-text and on the works cited page), misuse of several different types of punctuation, verb tense, fragments, subject/verb agreement, and effectively incorporating quotes. Despite still struggling with many concepts, Seamus's grade was ten points higher than his original grade on the first essay of the semester. He made many of the same errors as he did on essay 1. Seamus's research paper had a weak conclusion, comma placement errors, a lack of quotes to provide concrete evidence to support his ideas, and many errors in Modern Language Association (MLA) format.

Rhett: Lack of Engagement in the Platform

Rhett is in his twenties. He is not a recent high school graduate. He has two children, both under eight years of age. They live with him part-time. He works as a corrections officer at a local prison. He has a lot of tattoos, is of average height, and has short dirty blonde hair. Looking at Rhett's scores on NoRedInk, you can see that he also failed to complete all of the modules. Because Rhett is missing several scores, it is difficult to gauge his progress. Based on the averages of his classmates, Rhett is an outlier; he is the only student whose average dropped; his average decreased by 7% from the initial diagnostic to the end-of-semester diagnostic. Rhett was labeled as "below basic," based on his scores on the NoRedInk modules (67%).

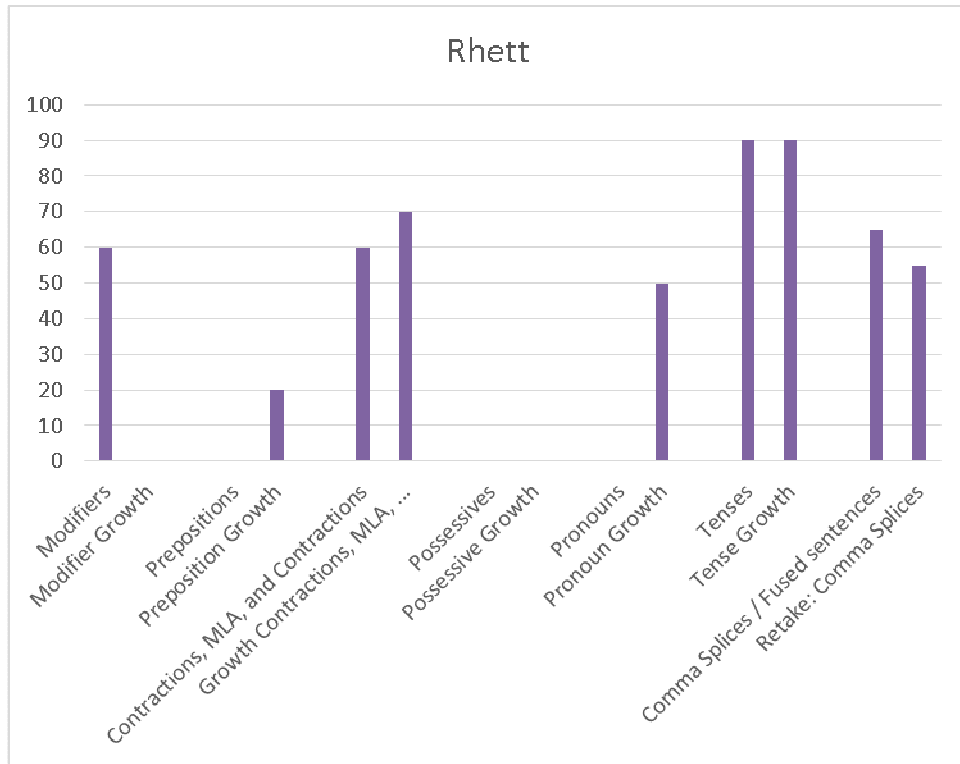


Figure 44. Rhett’s quiz scores on the NoRedInk platform.

Rhett earned a 75% on essay 1. The bulk of his errors were unnecessary and misused commas [incl. comma splices], inconsistency with Modern Language Association (MLA) formatting, failure to use third- person, lack of quotes to support his ideas, and commonly confused words [its/it’s]. On essay 2, Rhett scored 80% [but was marked down 10 points because it the paper was handed in late]. His errors included misplaced commas, informal language, failure to use third-person, and following MLA formatting rules. Rhett earned a grade of 80% on his final research paper. The content of his paper was good. However, it showed that he was still struggling with many of the concepts we had been discussing throughout the semester, both individually and as a whole class.

Arwen: Substantial Improvement in Grammar

Arwen is a recent high school graduate. She seemed a little shy, but was an active participant in class. She has a small frame and long hair. I do not know much about her family and personal life, except that she has a brother who is one year behind her in school. Arwen’s improvement shows that engagement with the NoRedInk platform equates to enriched knowledge of grammar. Arwen was labeled as “basic,” based on her scores on the NoRedInk modules (75%). Arwen’s scores on the initial diagnostic and the semester-end diagnostic show that she improved by 16%. Arwen’s score on the initial diagnostic was 56%. She correctly answered 31 of the 55 questions. On the final diagnostic, Arwen’s score was 65%. She correctly answered 36 of 55 questions. Although minimally, Arwen’s scores improved on almost all quiz retakes throughout the semester. She improved by 14% on pronouns, 13% on modifiers after she earned 100% on the practice lesson, and 6% on tenses.

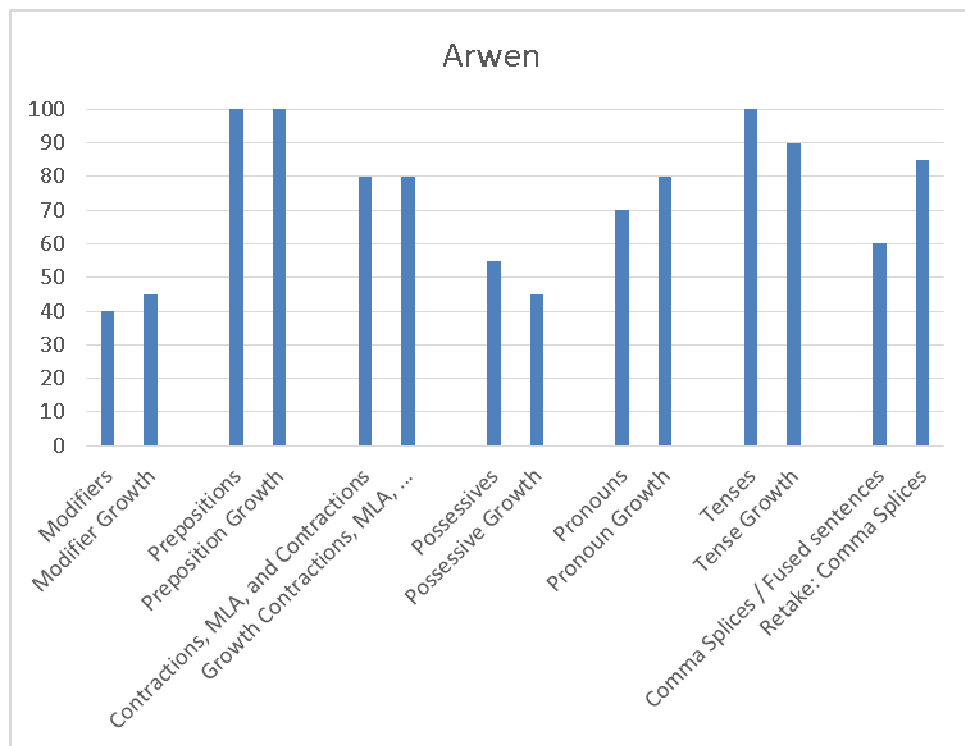


Figure 45. Arwen's quiz scores on the NoRedInk platform.

Arwen's scores remained the same for prepositions (she scored 100% on both quizzes), as well as contractions and Modern Language Association format (she scored 80% on each quiz). Arwen's score was 18% lower on the retake for possessives, and her scores significantly declined on the comma splice and fused sentences quizzes. She initially scored 80%, but later scored 65% on comma splices and 55% on fused sentences. Her scores on the comma quizzes were 80% and 75% [one month later]. These scores suggest that Arwen struggles with comma placement and possessives.

Arwen's first essay, a critical analysis of one work, showed that she struggled with some of the same errors as Seamus. She mainly struggled with Modern Language Association (MLA) format, missing and misplaced commas, using the wrong point of view, sentence fragments, and mixing of verb tenses. After meeting with me, one-on-one, to go over several necessary revisions and edits, Arwen turned in a revised draft. However, regrettably, she did not make all of the suggested corrections, and the paper did not meet the length requirement.

I noticed several improvements in essay 2 (synthesis). Arwen had very few errors with the MLA citation format, point of view, and verb tense. She also had fewer issues with comma placement. We discussed the importance of using more formal language when writing for academia, incorporating and explaining the significance of quotes, and rearranging paragraphs to help with the flow of her essay. Arwen's final draft of essay 2 showed great improvement. She successfully revised most of the errors that we discussed, but still made a few errors in her final draft, including errors in point of

view, misused punctuation, and sentence fragments. On essay 3, the synthesis plus, Arwen made many of the same errors that she made on essay 1. Her writing shows that she continues to struggle with errors in point of view, comma splices, and tense.

Arwen's rough draft of her research paper was also riddled with errors. However, her final draft showed improvement. She had very few errors in grammar punctuation, mechanics, and style. Arwen also showed improvement MLA format. Further, more in-depth analysis would be needed to determine whether or not these improvements are linked to her practice and performance on NoRedInk.

Sophia: Refining Competencies

Sophia is a recent high school graduate. She was not an active participant in class. She is tall and thin, with long brown hair. Sophia was labeled as "proficient," based on her scores on the NoRedInk modules (85%). Sophia's score on the initial diagnostic was 65%; she answered 36 of 55 questions correctly. On the final diagnostic, taken during the last week of the semester, Sophia's average was 76%. She answered 41 out of 55 questions correctly. Looking at Sophia's scores throughout the semester, you can see that her overall improvement based on her scores on the initial diagnostic and the semester-end diagnostic was 15%.

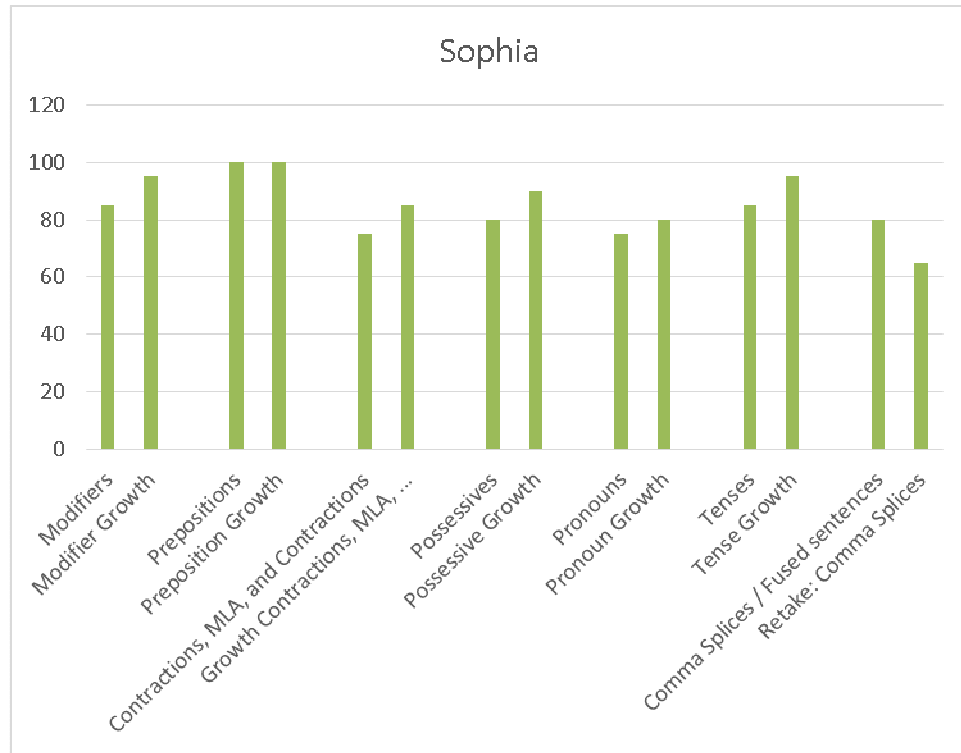


Figure 46. Sophia's quiz scores on the NoRedInk platform.

Although this increase is minimal, Sophia scored higher on almost all of the quiz retakes throughout the semester. Like Arwen, Sophia's score remained the same for prepositions (she scored 100% on both quizzes). She improved by 12% on tenses and 13% on both contractions and possessives. Sophia's score on pronouns increased by 7%. Her score on modifiers increased 12% after she scored 100% on the practice lesson. Sophia's scores declined on the comma splice and fused sentences quizzes. Sophia's scores on the comma quizzes show that comma placement is one of her weaknesses.

Looking at the scores on the initial and end-of-semester diagnostics, you can see that both Arwen (basic) and Sophia's (proficient) scores increased from the beginning of the semester to the end. Arwen's average increased by 16%, and Sophia's average

increased by 15%. Jules (below basic) improved by an impressive 57%, while Seamus's (below basic) score only increased by 3%. Rhett (below average) was the only student who did not show progress from the initial diagnostic to the final diagnostic at the end of the semester; his score dropped by 7%. Seamus's semester average, based on his scores on the NoRedInk modules, was 53% (below basic), while Rhett and Jules (also labeled as below basic) both scored 67%. Arwen average (basic) was 75% and Sophia's average (proficient) was a 85%. Comparing the semester average of each student (based on their scores on the modules) to their improvement from the initial diagnostic to the end-of-semester diagnostic, I did not see any obvious patterns.

Sophia, whose average was "proficient" on the NoRedInk platform, made many distinct punctuation and grammatical errors on the first essay. The bulk of her mistakes were punctuation errors (misuse of semicolons, and missing and misplaced commas) and mixing of verb tenses. She also had several typos, which led me to believe that she did not carefully edit her paper.

Sophia showed significant improvement in essay 2. She made very few errors. Sam's performance on essay 3 was similar to essay 2. She had one sentence fragment and a few minor mistakes with using Modern Language Association (MLA) format for the in-text citations. Her works cited page was perfect. This show that she has gained a firm grasp on formatting using MLA format.

However, her final research paper did not have a properly formatted work's cited page. Throughout the body of her research paper, there were sentence fragments, misplaced commas, and a lack of adequate support. The errors that Sam made on her

their actual skills and abilities were quite low. For example, looking at Jules and Arwen responses, it is evident that my students are struggling writers. Jules said:

Grammar is like a set of rules that explain how words are used in a language. My experience with Grammar has been Pretty Good, I get better at it everyTime [sic]. Grammar and spelling has changed so much specially [sic] when you are writing a text message. People say “Gud” instead of “Good”. [sic]

Jule’s definition of grammar came from *Merriam-Webster*. I can only assume he looked up the definition on his phone [the response was written in class]. The writing errors in his journal entry show that he is a struggling writer. He asserts that text messaging has changed “grammar and spelling,” referring to the accepted rules of etiquette. Jules recognizes that the medium of a text message is different than that of a more formal piece of text.

Arwen wrote:

Grammar can make or break a piece of writing, it is very important [sic]. I try to take time to perfect my grammar within my writing, but I know it may not be perfect. In high school we didn't do much with grammar; maybe the teachers assumed we learned all we need to know about it already? But, I think grammar is extremely important everywhere.

Similar to her formal writing in the course, Arwen’s journal entry contains several grammatical and mechanical errors, including comma splices, missing commas, and tense shifts. Sophia did not complete the initial journal entry.

As part of my research, I also conducted one-on-one interviews to learn about my students' past experiences and attitudes about grammar instruction; and their experiences using NoRedInk.

Table 9

Questions that guided the one-on-one interviews.

| | |
|-----------------------------|---|
| Interview Question 1 | What are your existing attitudes about grammar instruction? |
| Interview Question 2 | How have your existing attitudes about grammar instruction changed over time? |
| Interview Question 3 | What do you like or dislike about using NoRedInk? |
| Interview Question 4 | What do you perceive as benefits of using NoRedInk? |

Finding 4: Negative Attitudes of Grammar, Centered on Students' Perceptions of Previous Grammar Instruction, Were Common.

Students' attitudes about grammar instruction were varied, but they shared many common viewpoints. After transcribing the interview responses that I recorded, I coded the transcripts to determine communal themes. When analyzing my students' interview responses related to their retrospective memories of grammar instruction, several themes emerged. As detailed in the next section, the common themes were: (1) negative memories of prior learning, (2) perceptions of the varied quality of previous instruction, (3) complaints about inconsistency between instructors in their approaches to teaching grammar, (4) levels of exposure to modeling, (5) the importance of grammar and advice on how to teach it more effectively.

When asked about retrospective memories of grammar instruction, many students said that they did not remember any grammar instruction in high school. Many students remembered some grammar instruction in eighth grade, while others, like Mustapha, could not recall any grammar instruction after the first grade:

It was mostly between the end of kindergarten and the first half of first grade. One thing I remember specifically doing is—my teacher would write sentences on the board and there were purposely misspelled words or grammar mistakes and we had to write them in our notebooks with the corrections. We got graded on how many we could find. My teacher collected them and we got prizes depending on how good [sic] we did. As far as other grammar, in eighth grade, we has a lot of spelling and grammar. She was a really strict teacher, so we were

conditioned to get them right or we were penalized, not like physically, but more like grade wise.

Alivia, Beatrice, and Shirley remembered some grammar instruction during high school. Aphrodite said, “When I was a sophomore, we actually did a little [grammar practice]. It was a private school. We worked on it ... for a month or two. In elementary school, I remember learning the basics. I remember some grammar instruction in grades 6,7,and 8. In 12th grade we did misplaced modifiers and dangling modifiers, but like other than that I don’t remember specifics.” Aphrodite shared memories of “diagramming sentences in high school. I didn’t like that. It was difficult at first, and then I realized what certain parts of the sentence were.” Beatrice said, “I remember in my senior year of high school my teacher focused on grammar, and we did a lot of practices before class [sic] mainly in the beginning of the year. We would have to correct sentences and make sure punctuations [sic] were correct; the sentences were created by the teacher. I always struggled with commas and when to use them.” Shirley remember, “In my high school, we focused a lot on MLA [Modern Language Association] format and how to insert quotations, but it was never anything more than that. Sam said, “In high school, they [teachers] never really focused on prepositional phrases and things like that. They mostly focused on commas and apostrophes and things like that. We went over a little bit [of grammar] in my junior year of high school. I don’t remember much. It might have been a little bit about prepositions and stuff like that, but not very much.” When asked about specific memories of any type of grammar instruction, only one student, Tonya, had distinct, positive memories:

Absolutely! Throughout my previous years of education, grammar has always been really important. Grammar was the one thing they stressed; it had to be perfect so I always had an existing attitude about grammar. I always took pride in really making sure that I was thoroughly writing all of my work properly and using proper punctuation and all that stuff. And spelling stuff as well [sic]. ... It wasn't really just as much in high school as it was in earlier years. By high school, I didn't really need instruction aside from like maybe comma placement here and there so it really wasn't a focus that was really stressed.

Despite these positive memories, Tonya remembers getting papers back “with a bunch of red marks all over it.” She shared that she “would notice the differences of where to put a comma or not to put one. It [learning how to write grammatically correct] was mostly by trial and error.”

Several students felt that grammar instruction should begin in elementary school and continue through high school. Alex said:

We used to do some grammar in high school which I thought was pretty late; by high school, you should have a better grasp on it. Teachers seemed to think you already knew this, or the teacher before had already taught this, and we had never did it. We went over using apostrophes and that's about it in middle school. And in high school, freshman year, the teacher would be upset that they were not being used correctly. In high school, we did a lot of vocabulary.

Sabriel shared, “I feel that grammar is started early in education and then they [teachers] just give up on it. If it continued through middle school and the first two years of high school, it would implant in the student's head that speaking properly is

important.” Sabriel’s memories of grammar instruction confirm many students’ attitudes about grammar and their feelings that grammar instruction should begin early in elementary school and be consistent through high school.

Inconsistency of Instructional Approaches

Students’ memories of grammar instruction were largely negative. One reason for students’ attitudes towards grammar instruction was their feelings that the instruction was inconsistent. Students described memories of different teachers having idiosyncratic rules and preferences. Students complained that grammar was not taught uniformly. Holder said, “When I first started learning about [contractions], they [my language arts teachers] were like ‘Oh it’s okay to use them sometimes, but not all the time.’ But, then you get to the next year and it’s like you can never use these, and then the next year you can use them.” Holder also shared memories of “never really liking grammar because it was always so like [sic] one year you would be taught one thing and then the next year they’d change it ... Rules are almost never the same from year to year.” He feels that “If you’re [teachers are] going to teach the same thing just teach it the same way. Make it a uniform lesson, not a different lesson every time.” Holder was particularly bothered by the perceived subjectivity and the variety of teaching methods used to teach grammar. Inconsistency seemed to be the reason for his largely negative pre-existing attitudes towards grammar. For him, English teachers were less respected than science teachers, who seemed to teach in a more uniform and consistent way. He noted, “every time I took physics from a different teacher they always did it the exact same way. It was set in stone; it was law.”

Mustapha recalled, “In high school, if it were a couple of mistakes here and there, she [my teacher] would definitely write them out, but she would not penalize me for them. In AP English, she [my teacher] ignored errors and just focused on content. With some students who made a lot of errors, she wouldn’t even grade the paper. She would return it and just say ‘go fix it and then resubmit it. I cannot correct it with all of the mistakes.’ ” Beatrice remembers learning “basic comma rules, basic sentence structure in weird small books through grade school, and then in high school they [teachers] expected you to know everything so it was never in depth.” Beatrice said that her “high school teachers, for the most part, did not write comments about grammar or spelling on [her] papers.”

Modeling by Teachers and Inconsistent Quality of Instruction

The value of modeling was a common theme in student responses. Holder shared his frustration with the fact that not all of his English teachers follow the language that they uphold. Students complained that teachers often spoke incorrectly. Many students wondered, “How can you become a teacher if you do not know grammar?” Mustapha said, “I do not think you [a teacher] should be making mistakes. ... If you gave me something that you had written, and it had a lot of mistakes I would assume that you did not put much time and effort into it.”

Students shared thoughts that the grammar instruction that they did receive was boring, basic, and confusing. Sabriel said, “I know I didn’t like it [grammar]. There was nothing there to make it interesting.” Tess had several memories of grammar instruction being monotonous:

My previous grammar instruction was very boring and basic; we just sat there and wrote down all the rules as our teacher went on and on about how bad we were at writing. We were given papers about the rules and for like prepositions we would have to write out all the prepositions and take quizzes and if you didn't remember you'd fail.

She also said, "I didn't like it [grammar] at all, I thought it was boring, I didn't care that much about it. I could write and make sense about what I was writing, but grammar just never intrigued me." Many students blamed their lack of interest on their teachers' lack of enthusiasm. Josephine said, "if I had teachers that [sic] were excited about it [grammar], I would definitely remember." Holder said, "When we had to do grammar they [teachers] were really uninterested. After a point they just kind of gave up; they just kind of walked us down the path, but didn't tell us anything." Sabriel shared that her "language arts teacher was not enthusiastic about [grammar] it," and Tonya said that her teachers "kind of left it up to the student to know everything in terms of grammar." Mustapha remembers "the instruction was mostly book work, like 'here is a sentence; correct the mistakes.'" He added, "The sentences were from a grammar book. I remember how difficult it was." Aphrodite also remembers the difficulty of trying to teach herself using a grammar book. She said, "It was difficult to teach myself and not have anyone to explain it [parts of a sentence] better. So, it was like, 'I don't understand, I just have to deal with that and move on.'"

Many students shared that they did not even remember basic comma instruction. Sabriel shared, "I don't really remember much about being taught grammar. ... I have never had comma instruction before this class [College Composition]. In my English

class last year, and all through high school, we just read books. If you wanted extra credit, you could write essays, but my teachers through all four years never marked or graded grammatical errors. They only focused on the content.” Several students described their teachers as uninterested. Some students felt that a lack of interest on the part of their instructors adversely affected their learning of grammar. Tess said, “My attitude has changed because you [Alyson Snowe] make learning grammar fun, you quickly remind us of the rules.”

Students also shared frustration that there wasn't any follow through with many grammar lessons and activities. Sabriel said, “We did not get them [daily oral language worksheets] back, corrected, or graded, so I never knew how I did on them. It was like here is a sentence, fix it. And, it was a five minute part of my day. It wasn't anything that we spent time on. . . . They had the math teacher doing it. It was in homeroom, not in my language arts class. I had a math teacher as my homeroom teacher, so she was kind of like ‘here, take this.’ ” The same student said that if she asked questions, she was told, “Just write whatever you think.” Shirley said, “Obviously our English teachers taught it [grammar], but it was never drilled into our heads. It was kind of like you figure it out as you go. One class was never dedicated to just grammar. You got papers back and edited them. In elementary and middle school, we focused on commas and semicolons and stuff like that. . . . I remember them [teachers] telling us we needed to use them and why a period goes here and it ends a sentence and basic stuff. But, I don't remember having a full grammar lesson.” Alex, who took a second language in high school, said, “Studying Latin in high school, I

learned a lot about grammar. I had to learn a lot of the rules of grammar in order to speak and read Latin, things that I had not learned in my previous classes.”

Finding 5: Students Regard Grammar Instruction as Important.

Surprisingly, although their prior experiences were mainly negative, most students said that they felt grammar instruction was important, they felt that it should be emphasized more, and they recognized that not having good grammar would adversely affect their success. These unique attitudes were pretty uniform with students in both of my classes.

Sabriel shows that she understands how important it is to learn grammar, when she says, “if you do not know proper grammar, it will delay your learning.” Aphrodite said, “I didn’t think that grammar was that important before [throughout earlier years of schooling]. When people talk, I am sometimes like ‘that is not the right way to say it’” Tess addressed even mentioned social media. She said:

I think learning grammar is important. If you read what people write or how people talk sometimes, they don’t make any sense. Even when people post on social media, like Instagram I get pissed off [sic]. If people don’t write well or talk well, I kind of think they’re uneducated and they don’t know what they’re doing; you wonder if they were ever taught how to write well or correctly. I am planning on becoming a nurse, so when I’m writing up stuff, it is going to be really important to write correctly and make sure everything makes sense.”

Aphrodite shared, “when reading, I pick up on things that could be worded differently. It makes more sense when it is correct. I do not think that grammar is taught enough.

You are taught the basics in elementary school, then in high school, English is just literature.”

Some students believed that they missed out on something because their teachers did not include direct instruction on grammar. For example, Beatrice said, “ I didn’t really like it [grammar], but I knew it was important and I didn’t mind going over things in the beginning of the year. . . . Grammar was never enforced enough. We may go over a lesson, but we would not revisit the lesson to reinforce the ideas. This reinforcement would help to make these concepts stick with students for their educational career.” Tonya feels that “they [teachers] should have stressed it [grammar] more; there are a few technical rules in grammar that I think could have been extended on.”

Some students recognized that grammar affects readability. Mustapha shared a concern that errors are a distraction to readers. He said:

If you [my professor] wrote me a long note that had a lot of grammar errors, I would probably not read it. I would need to correct it first and then read it. . . . The errors are a distraction. If you can get most of the grammar correct, the reader will have a tendency to focus more on the content which is what you want to get across, rather than just focusing upon errors. . . . If I took the time to get rid of all those distractions, you would have probably better understood what I was trying to say. If a reader finds a mistake, they will probably spend more time focusing on the mistake rather than the important message.

Mustapha also believes that teachers make judgments based on the quality of a student’s work. He said, “If it [a paper] is full of grammatical errors, my teachers will

assume that I did not put much effort into it or did not take the time to read through it before they handed it in.” Josephine shared that knowing proper grammar helps one communicate better. She said:

I think that in order to effectively communicate with people in a certain way is extremely important. Verbally, if you cannot communicate, then you are not going to get very far. ... You will notice that certain things make more sense depending on how they are written. If I did not write as well, I would seem like a less credible source. I would be taken less seriously, and I think that people could get the wrong idea or impression of what something is about.

A number of students acknowledged that grammar is a marker of being well-educated. Aphrodite showed agreement with this idea, saying, “I think grammar is important because it makes a person sound more official and smart. It is not something that is taught a lot, but if you are going for an interview or something people often look for if you say things right or how official you are or if you sound smart. If someone has good grammar they sound smart. ... If I were interviewing someone with poor grammar I would think either they were not educated enough about it or they don’t care enough to try to use good grammar.” Sabriel also expressed her feelings about the importance of good grammar and her concerns about the lack of grammar instruction in school. She stated, “I think the way that people recognize grammar definitely has an effect on how they present themselves because if someone comes up to you and is completely grammatically incorrect with their speaking, just with common English, it gives the impression that they do not have as much of an education as someone who comes over and has perfect formal English—even if one has a college degree and one

just graduated high school. I think if schools are required to do Common Core, grammar should be included in Common Core because that is just as important.”

Grammar affects the perceived credibility of the author. Tonya noted, adding that good grammar is important if you want to be seen as a credible source. She said:

When someone’s reading your paper you want them to take it seriously; you want them to understand what you’re talking about. Spelling mistakes, punctuation mistakes, and proper grammar will affect what you’re trying to say. I would like to become an optometrist, so I absolutely believe that the grammar instruction that I have received will carry over into my career. As a doctor you need to be well-spoken and taken seriously, so proper grammar is a way to be professional. If I had a colleague who was not well-spoken I would assume that they did not value grammar as much as I did throughout my education.”

Grammatical competence is seen by these community college students as a way of moving forward with their careers. Many students stated that they thought grammar was important in future employment of all types from healthcare to retail. They stressed the need for good language skills in the job interview, as well as their future careers. Ava said, “If you want a good paying job, you need good language skills and good grammar to get anywhere. ... If you are going into retail, you would want to be able to communicate correctly with customers; it [grammar] would also be important if you were writing emails. But if my boss presented something that was ungrammatical, I would think it was unprofessional. A boss needs to speak professionally to be taken more seriously.” Alex agreed, stating:

Grammar instruction will be beneficial to me in the future. Any job requires some sort of public speaking, whether it be talking to coworkers. You have to know how to make your intentions clear to make sure things get done. Sounding intelligent is everything. Good grammar is really important, especially if you are trying to work your way up the ladder of whatever company you want. I tend to judge people by how they talk, on how important they are. Someone who speaks good, proper English, I feel is more important and valuable and I feel an employer would have the same outlook.

Sabriel said that she wants “to be a pediatric nurse,” and she thinks “that grammar will be important. With any profession where you have to talk to people, it will be important and that is basically every profession in the world.” Mustapha, who is leaning towards psychology as a career, said “English is probably a huge part of psychology. English is actually important in every area, but psychology is more writing based than chemistry.” According to Mustapha, “if you were a person who were illiterate, like cavemen talk, in the United States people would look down on them [sic]. In a job, even if the illiterate person could do the job better than the person with good grammar, the person with good grammar would probably get the job. He will improve and surpass the caveman guy because when trying to speak to the caveman guy, the caveman guy would be static and not be able to improve.” Beatrice recognizes, “In almost any job, and with the technology they have right now, it’s important to communicate clearly and show people that you can speak with a certain amount of intelligence. I assume that if a person speaks well, by not using slang and double negatives, then they are educated. The more proper and clearly you speak the

easier it is to get your point across.” Ava said that if she were conducting interviews for a job position, she would:

choose the more well-spoken candidate. But, in general, depending on the person and how I see them. If I see them as someone who slacks more and is more confident in themselves when they do not even speak properly I would lose respect for them because they could very easily have good grammar, but they do not try. ... You need to learn, over time, how important it really is to say things a certain way— properly. In a job interview, for example, if you do not speak properly, they will notice it and be like ‘this person needs proper language’—in customer service.”

Students shared that they now recognize, looking back on their previous years of education that grammar is more important than they were led to believe. One student, Beatrice, responded, “Well, obviously, part of K-12 education has a good base in grammar and vocabulary and stuff. When I was younger I thought English was stupid because I spoke it I didn’t think I needed to learn anything about it. As I got older, I realized how important it was to have a good understanding of grammar and its structure and things like that. It’s important to learn how to communicate effectively and present yourself in a way that is clear to other people in future uses as in the workplace and further schooling.” Very few students downplayed the importance of grammar. One student spoke to the ability to independently improve grammar by reading books to yourself.

Students thought it was key to familiarize themselves with grammatical terms. “I think I need to know it because when I am doing stuff, it asks me to name an adverb

and I do not know what it is,” said Ava. Although many students shared aversion towards their prior grammar instruction, they felt that grammar instruction should have been more of focus of their language arts classes. Tonya said, “My science and history teachers didn’t mark grammar errors, nor did they affect the grade on the assignment. I took a math class that required me to write an essay, and my professor expected perfect grammar. She stressed the fact that grammar and punctuation had to be pristine and perfect. Proper grammar can be used in many situations. This was the first class other than English where a teacher really cared about grammar, with the exception of perhaps a couple of history teachers in middle school up through high school. If you want to be taken seriously and want your subject matter to be highly considered among your peers you want to make sure your paper is free of errors.”

Most students also felt that grammar instruction should be part of the curriculum through at least middle school, if not high school as well. Students shared concerns that most teachers did not stress the importance of having good grammar skills. Beatrice revealed, “English was mostly vocab and reading for comprehension. When I took my SAT exam there was a section on writing, and there were questions related to grammar; some of it was mostly common sense comma placement.” Beatrice also stated, “Teachers were more lenient. If there were grammatical errors, our English teachers would give us suggestions on how to fix them. I prefer the English I have now [College Composition] because in class we help each other correct our errors.” Many memories of specific lessons involved little class time and lack of dedication on the part of the teacher. Tess said that her teacher “used a smartboard for the first five minutes of every class. You would have a notebook to write your answers [correcting

sentence errors] and we would go over it in class; it was like a warm-up. I can only remember learning parts of a sentence.” Ava’s memories were mainly from middle school. She said, “In middle school, I think I learned about double negatives. It [the grammar instruction I received] was mainly just reading in a grammar book. In high school, we had to finish a book [grammar book], and then we could move on. It took me like a month and a half to finish the book and then we just went on to a new subject. There wasn’t any actual instruction.”

Tonya said, “I feel that in the freshman and sophomore year they should of put more emphasis on grammar.” One student showed contemplation, stating “Grammar should be taught in elementary and middle school. As far as high school, maybe take placement tests and depending on your score, you would have to take a separate grammar class in addition to your regular English class.”

Alex said, “In speaking I do not believe that grammar is so important because people just perceive what you are talking about even if it is not perfect English we have enough knowledge of the English language to decipher what is being said and what is meant.” However, later on in the interview, the same student, Alex, contradicted himself, saying:

I feel grammar is important because it shows that you are educated and that you care. It makes sentences more clear and more complete. I am currently working for a tree cutting company. Because my boss is educated and speaks English well, the work environment is affected. It makes me feel as if my job is important. I’ve also worked with people who were undereducated and did not make good sentence structure and it made them sound not smart [sic]. I looked at them

differently, as if they were not as important as someone who had good grammar. I would tend to look up to the person who was grammatically correct.

Overall, students recognized the importance of good grammar and felt that grammar should be consistently taught in school.

My students confirmed the validity of previous research in composition instruction which shows that grammar instruction was given a bad name because it has always been associated with rules and correctness. “Throughout most of its history as a college subject, English composition has meant one thing to most people: the single-minded enforcement of standards of mechanical and grammatical correctness in writing” (Connors, 1985, p. 61). It seems as though not much has changed since the early 1900s in regard to teachers who were not trained in grammar instruction themselves, making it almost impossible for them to teach it with the enthusiasm and vigor that it requires to be taken seriously. Largely untrained and inexperienced graduate students, composition instructors relied on handbooks to teach grammar. Connors quotes McCrimmon (1941), stating:

Little wonder that in such a sea of confusion [the new teacher]clings to his handbook as a shipwrecked sailor clings to his raft, and by an interesting human weakness, soon comes to believe that these rules, which only yesterday were unknown to him, are the sole criteria of good writing (69).

My students’ responses also support Myhill, Jones, and Watson’s (2013) claim that students’ learning about writing is influenced by their teachers’ knowledge. Their study “explores the complex interrelationships between teachers’ metalinguistic content knowledge [knowledge about language], specifically their grammar content

knowledge, and their use of that knowledge in the teaching of writing” (Myhill et al., 78). How can teachers teach something that they themselves do not understand? A lack of grammatical pedagogical content knowledge, impacts a teacher’s ability to foster classroom climates which nurture effective grammatical conversations (Myhill et al., 89). Students’ development of grammatical understanding of written text and their compositional decisions are impacted by their teachers’ grammatical content knowledge. Naturally, deficits in teacher content knowledge plays out in pedagogical practice.

Conclusion

In this chapter, I have attempted to place my research within several contexts that, I believe, influence my study. Using a participatory approach to research requires participation of others. Students’ retrospective memories of grammar instruction have value because their insight sheds light on the many reasons why grammar instruction is controversial. I shared case studies to show how students experienced NoRedInk in the community college classroom. Students’ participation varied. Some students completed all of the assigned modules, rendering the platform a meaningful part of their learning. However, many student’s engagement with the platform was slight.

There does not seem to be a question about whether or not grammar should be taught, but *how* it should be taught. Ultimately, my goal is to present findings that composition instructors may find value in when deciding how to incorporate grammar instruction into a college composition course. I have found that most students enter my class without basic knowledge of grammar, punctuation, and mechanics. As a writing instructor, part of my responsibility is to engage my students in practices that will

develop their literacy. Based upon their responses in the on-on-one interviews, students are drawn to subjects for which teachers show a passion for teaching. Most students came to my class with negative attitudes about grammar due to their previous experiences with grammar instruction. Remarkably, despite these preconceptions, most students shared feelings that grammar instruction and knowledge of grammar is very important.

CHAPTER 7

SYNTHESIS

The purpose of my study was to gain a better understanding of how students experience a digital grammar tool in the context of a community college writing class, and the relationship between students' attitudes towards grammar and their performance on the digital platform. There were five major findings: (1) students had positive reactions to the NoRedInk platform; (2) almost all students experienced growth in grammar knowledge as a result of using NoRedInk; (3) student attitudes and experiences with grammar affected their performance on the digital platform; (4) negative attitudes of grammar, centered on students' perceptions of previous grammar instruction, were common; (5) students regard grammar instruction as important.

Students used the platform to different degrees. I believe that this could be altered with teacher intervention. Consistent surveillance would improve students' participation. Surprisingly, despite their pre-existing attitudes about grammar, attributable to previous instruction, students recognize that grammar is important.

Discussion of Findings

The discoveries of my study add to the current body of research on alternatives to traditional grammar instruction, the use of new literacies in literacy instruction, and the use of digital tools in a community college composition course. I gathered quantitative data from my students' performance on NoRedInk, and qualitative data

through journal entries, in-class discussions, and one-on-one interviews. Students enjoyed using the NoRedInk platform, and they experienced differential growth by using the platform over time. Students' grammar knowledge increased, regardless of their previous knowledge of grammar (determined by their initial performance band placement on the platform). All students, save one, showed some growth.

I also realized that negative attitudes towards grammar, due to previous grammar instruction, are common. The case studies that I conducted showed that students use the NoRedInk platform in different ways. Lastly, I discovered that consistent surveillance would improve students' participation. Teachers should regularly view students' activity on the platform to ensure that they are progressing through the assigned modules.

When analyzing the quantitative data from NoRedInk, I found that on average, students' knowledge of grammar improved over the course of the semester. All but one student (16 out of 17 students) showed improvement from the initial diagnostic to the end-of-semester diagnostic.

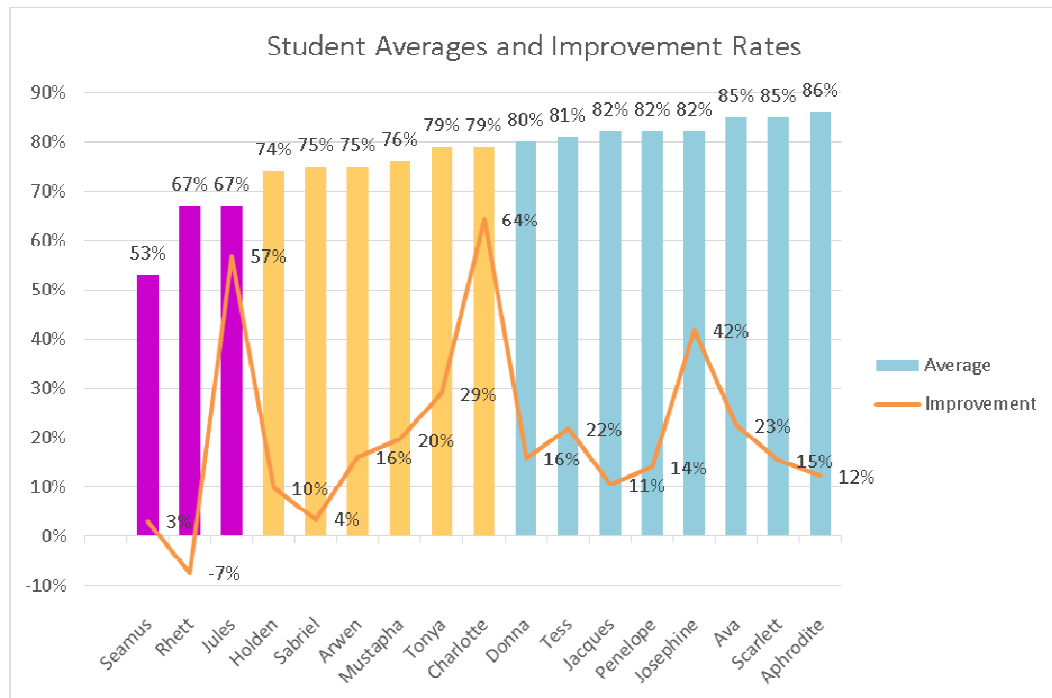


Figure 48. Students’ growth from the initial diagnostic to the end-of-semester diagnostic.

The average of the student, Rhett, who did not show improvement dropped by 7%. The average improvement of the class was 19%. The average grade on the initial diagnostic was 59%, and the average grade on the end-of-semester diagnostic was 70%. Rhett’s scores were 55% and 51%, respectively. The majority of students labeled as “basic” improved the most (24%). Students labeled as “below basic” improved the least (18%), and students labeled as “proficient” improved by 19%. I also noted that 8 of my 17 students ended the semester as “proficient,” due to their performance on NoRedInk, despite the fact that only two students, Holder and Jacques, scored in the “basic” performance band on the initial diagnostic. My other 15 students scored “below basic” on the initial diagnostic. Nine of my 17 students improved their percentage score enough to be placed into a higher performance bands. My analysis of

the data supports that NoRedInk is an effective digital tool to help students improve their grammar. On average, my students' grammatical knowledge increased because of using NoRedInk over the course of a 16 week semester.

After transcribing and coding the transcripts of the one-on-one interviews and my students' journal responses, several themes emerged from their retrospective memories of grammar instruction. The common themes included perceptions of quality, complaints about inconsistency, exposure to modeling, and feelings that grammar instruction is important. With this qualitative data, I was able to draw conclusions about students' attitudes towards grammar and the relationship between their attitudes and their performance on the digital platform.

The literature articulates that people's attitudes about grammar are important. Many studies have reported that teachers who have positive attitudes about their teaching can have a significant impact on their students' achievement (Ashton, Webb, & Doda, 1983; Berman & McLaughlin, 1977). As with any subject, teachers' positive attitudes about grammar are a precursor to any effective instruction.

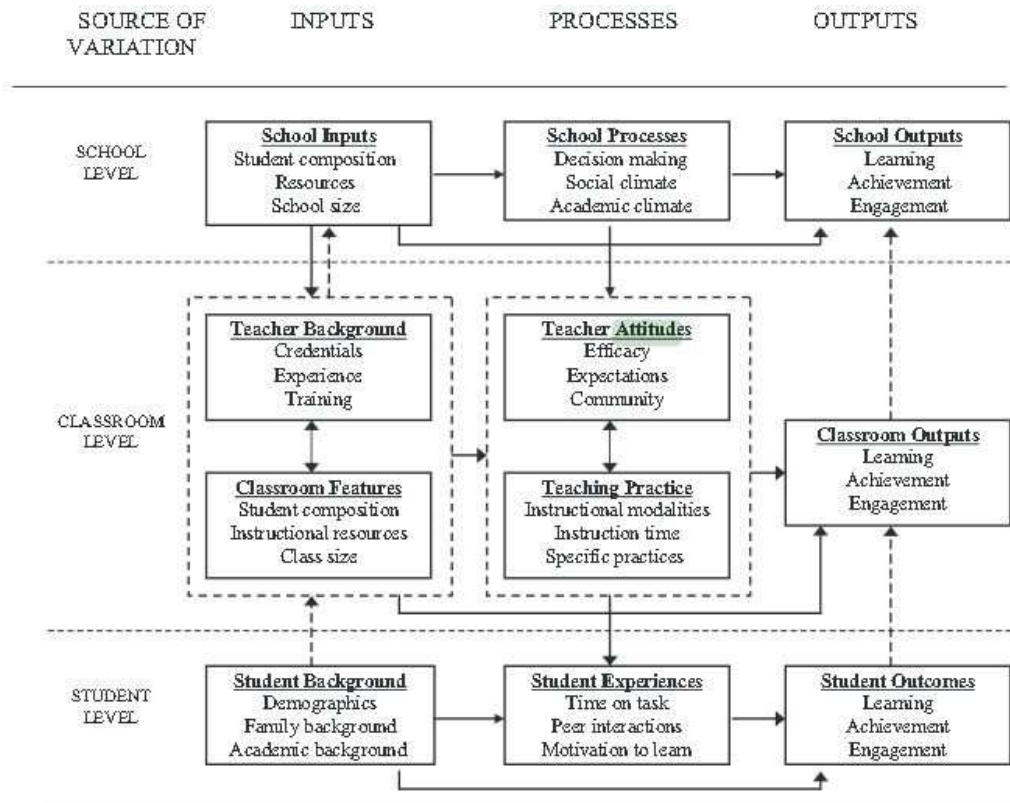


Figure 49. A multilevel theoretical framework of classroom and school effects.

Positive teacher attitudes foster positive student attitudes. Factors affecting teachers' attitudes include confidence about subject content, willingness to utilize curricular and pedagogical innovations, and a commitment to student learning (de Souza-Barros & Elia, 1997). The association of grammar with rules turns off a lot of students. Pair this with a teacher who does nothing more than error hunt and possesses a disdain for grammar themselves, and success becomes challenging. Teacher attitudes and student attitudes have a cyclical relationship. Van-Zalingen claims that teachers should be pushed out of their comfort zones: "Not only do we owe it to our students to put their interests first, but we also owe it to ourselves to accept the challenge of extending

beyond our comfort zones in search of what is truly effective in improving our students' writing” (1998, p. 13).

Throughout the study, several themes surfaced from student writing and one-on-one interviews. Students had mixed attitudes about grammar instruction. The results of my study indicate that students’ attitudes influence their learning. Students’ pre-existing attitudes about grammar influenced their attitudes towards present-day grammar instruction.

Relationship to Theories and Literature

Literature on digital media literacy (Hobbs, 2011; Grabill and Hicks, 2005; Lankshear and Knobel, 2003; New London Group, 2000; Gilster, 1997) served as a foundation for this study. The digital literacy literature says that students use digital platforms differently, students’ use of the platform might be affected by how a teacher talks about a platform, and monitoring of a platform’s use is important. In addition to literature on digital literacy, I explored the work of several eminent scholars (Hillocks and Smith, 1991; Kolln, 1981, 1996; Delpit, 1996, 2006; Elley et al. 1975, 1979) on language use and grammar instruction. Looking at the work of early scholars on alternatives to traditional grammar instruction (Christensen, 1963, 1976; O’Hare, 1971; Hake and Williams, 1979; Strong, 1985, 1986; Connors, 2000) provided me with the context for my research.

My findings are consistent with research that has reported the benefits that digital technologies have on student writing. Integrating technologies into the classroom has the potential to motivate students and enhance key components of instruction. Students are no longer passive recipients of information, but rather active

collaborators due to the affordances of technology (Hafner et al.). Results of my study, as well as the study by Kilpatrick et al., (in which they explore how digital tools bolster the writing process) suggest that integration of digital tools supports students' learning. Features of digital tools, such as goal-directed activities and immediate feedback enhance student motivation.

Strengths and Limitations of the Study

This work has affected me as both a teacher and a scholar. The insight I gained from student testimonials was especially enlightening. I juxtaposed research methods to uncover the strengths and weaknesses of each method. For example, a quantitative analysis was applied because it allowed me to use structured questions where the response options were predetermined (NoRedInk modules). Each qualitative and quantitative data source had weaknesses, but when these sources were combined, I was able to gain a fuller picture of student understanding and a greater interpretation of their learning experience. My expectation was that weaknesses in one methodology would be compensated for by strengths in another. Students' scores on NoRedInk do not tell the whole story. The data I gathered from my students' performance on NoRedInk could not convey their pre-existing attitudes towards grammar instruction.

My overall sample was low. The results of my study may not be generalized to other populations because of the sample I used. "The purpose of qualitative data is not to generalize findings but to form an interpretation of events but you still need to indicate limitations to generalizability" (Creswell, 1994, p. 19). The voluntary nature of the study was a limitation. The results are not representative of the attitudes of all community college students (Moussu, 2010).

The number of students who failed to participate through the end of the semester or who withdrew from the class affected my sample size. I originally had 48 students registered for two sections of college composition; nevertheless, only 17 students completed the initial and end-of-semester diagnostic on NoRedInk. Without this quantitative data, I would not have been able to evaluate students' performance. Even though there are no specific rules when determining an appropriate sample size in qualitative research, I was hoping to have more students participate. "Qualitative sample size may best be determined by the time allotted, resources available, and study objectives" (Patton, 1990). I did not intend, however, to make generalized statements based upon my data, but rather try to find meaning in my students' responses. For my study, the quality of my data was more relevant than my sample size.

Strengths of my study include the mixed-methods design. This study supported the use of triangulation, as the cross-verification of my data allowed me to assess its consistency. I was able to better understand my students' pre-existing attitudes towards grammar instruction by studying it from more than one perspective. I found commonalities between my study and previous studies that incorporated technology in the college composition classroom. These studies not only assisted me in developing my study, but also in determining future studies in the underexplored area of grammar instruction through technology.

Implications to Educators

Most students shared that they enjoyed NoRedInk because of its ease of use, personalized content, and immediate feedback. The results of my study emphasize

significant opportunities provided by online grammar tools such as NoRedInk. My students' attitudes towards grammar, which were formed during their earliest experiences in school, and their performance on the digital platform were correlated. Students used the platform in different ways, but almost all students showed some increase in grammar knowledge. Mustapha, for instance remembers having a strict teacher, but describes his experience as somewhat positive, sharing that his teacher gave out prizes to students who did well. Mustapha seemed to enjoy working on NoRedInk. He mastered 13 topics and improved by improved by 20% from the initial diagnostic to the end-of-semester diagnostic.

Holder, who was placed in the performance band of “basic,” on NoRedInk, stated that he “remembers never really liking grammar” because “it is not taught uniformly.” He shared contempt about having to complete assignments on the digital platform in class and only showed a 10% improvement. NoRedInk would benefit a student like Holder, after consistent use, because the lessons are all uniform.

Ava, who showed a 23% improvement, said that she “always kind of liked grammar” and gets very annoyed when people do not use proper grammar. Another student, Tonya, also shared that she has always enjoyed grammar and believes it to be important. She said that “Grammar was the one thing they [teachers] stressed had to be perfect so I always had an existing attitude about grammar. I always took pride in really making sure that I was thoroughly writing all of my work properly and using proper punctuation.” Tonya improved by 29% from the initial diagnostic to the end-of-semester diagnostic.

Rhett, who earned his GED, does not remember any grammar instruction prior to taking the GED exam. He does, however, feel that grammar is important. Rhett was the only student who did not show improvement over the course of the semester; his average dropped by 7% from the initial diagnostic to the end-of-semester diagnostic. When looking at Rhett's activity on NoRedInk, I noticed that Rhett only mastered 8 topics. On average, his classmates averaged 12 topics. Two students mastered 22 topics.

One implication is that students' past experiences and retrospective memories of grammar instruction affect their current attitudes towards grammar. This, in turn, has affected their grammatical knowledge. Alternatives to traditional grammar instruction are necessary to engage students and change their attitudes about grammar which were formed in their early years of schooling. Considering these findings, teachers should utilize technology for grammar instruction. Technology can make learning easier, more efficient, and more motivating. Digital technologies should be harnessed to improve instruction and enhance student learning because technology offers rich learning opportunities.

One suggestion I have for instructors who are planning to use NoRedInk, with undergraduates at a community college, is to follow-up with students after they write their first essay to plan lessons on the digital platform. I find that if I meet with students one-on-one and discuss revisions to their essay, I can help guide them as to what lessons would be most beneficial.

I only discovered a couple cons of the program. One is that some of the pop culture was unsuitable for a younger demographic. Another con is that students may

be overwhelmed at first because there are so many lessons and learning objectives. This can be remedied by helping students choose the pathways that would be most beneficial to them individually, based upon their writing in class. Next time I use the program, I will also be prepared to encourage more consistent use, as some students did not complete all of the assigned modules.

Teacher Attitudes

Many different variables influence student performance. Among these variables, teacher enthusiasm is prominent. If a teacher, for example, does not show a positive attitude towards the subject, students' attitudes towards the subject can be adversely affected. As mentioned in the literature review, numerous studies have been conducted on incorporating the use of technology in the writing classroom and how digital technologies benefit student writing (Sackey et al., 2015; Martin & Lambert, 2015; Balkun, 2011; Hobbs, 2010; DeVoss, 2010; Eidman-Aadahl, 2010; Hicks, 2009; Kirkland, 2009; McKee, 2007; Kress, 2003; Alvine, 2000), but there is an evident gap in research on the use of technology for grammar instruction. The implications, limitations, and recommendations for further study are presented in this chapter. This information can be used as best practices for instructors integrating technology for the instruction of grammar.

I chose to use a mixed-methods design, as one method would not have provided me with all of the information for which I was looking. An open-ended interview procedure allowed me to hear my students thoughts about previous grammar instruction and learn about their any pre-existing attitudes towards grammar. I blended personal narrative with qualitative data from the diagnostics, quizzes, and modules on

the NoRedInk platform. Triangulation helped me connect each of the data sources. This rich data will be useful to instructors who are looking for alternatives to traditional grammar instruction. The data I collected was directly applicable to the research questions.

The Importance of Teacher Preparation

Many teachers have ambivalence about teaching grammar. When describing his journey to becoming an English teacher, Gribbin states, “I student taught in English at an urban junior high school in western Pennsylvania. As part of my responsibilities, my cooperating teacher asked me to teach a unit on verbals to her ninth graders. Small problem: After four years as an English major, I hadn't learned enough grammar to teach it, although I wasn't about to confess this shortcoming to my cooperating teacher. I believed I was the only student teacher in America who had slid through four years of college, written papers and essay exams, but had failed to learn English grammar” (p. 17). Like Gribbin, many teachers dismiss grammar instruction or are reluctant to teach grammar because they are not confident in their knowledge of the subject. Teachers should have more hours of grammar training in college and more hours of non-traditional grammar instruction in their own classrooms. In a study conducted by Cheung (2002) participants also agreed that professional skills (such as knowledge of the subject, preparation, and ability to motivate students) were more essential than language skills. Attitude is a term used quite often in school. Teachers complain about a particular student's “bad” attitude that interferes with their success in completing an assignment. Coaches argue that their players must have a “winning” attitude if they want to be successful. “Rarely do we go beyond these uses of the term

attitude to understand its origins, its role in the learning process, and how an explicit attention to attitude in the language arts classroom might help students become better readers and writers,” says Lawrence Musgrove, Associate Professor of English, in his article, “Attitude: Coming to Terms.” Today, attitude corresponds to one’s habit of thought. It affects our disposition towards an object or event. Being aware of students’ attitudes towards learning, in this case grammar, our own attitudes towards teaching contribute to our success, as students can read our attitudes. If we don’t recognize our existing attitudes, and those of our students, we cannot address the effects that these attitudes can have in our classrooms.

Grammar, along with phonology and morphology, constitutes an essential component of any language. However, the clear implication of many textbooks, courses of study, and methods classes is that the field of composition and rhetoric is decidedly anti-grammar. While we don’t believe grammar teaching is useless, we often struggle to make grammatical instruction relevant and exciting. We are continually looking for alternatives to traditional grammar instruction. NoRedInk is a great tool for incorporating grammar instruction or supplementing in-class lessons, in turn resolving many tribulations related to the teaching of grammar.

Recommendations for Further Research

There is a gap in literature of studies examining the use of technology to teach grammar. It is very important that teachers are prepared to effectively implement technology in their classrooms. My work is groundbreaking, and raises all kinds of questions about effective ways to teach grammar and how technology can be used for pedagogic purposes. Research questions that emerged:

- Can students' pre-existing attitudes about grammar be altered?
- How could students' participation with NoRedInk be improved?
- Are there other digital tools that could be used for grammar instruction?
- What are the most effective ways to integrate technology into the curriculum?
- In what ways can teachers develop technology literacy?
- How can retention of community college students can be improved?

As important as digital literacy is, there has been very little research on using technology for grammar instruction.

My study responded to the gap in the literature about the ways in which technology can be used to teach grammar. Further directions for research include the increased use of technology for grammar instruction. I recommend that future studies use a larger sample size of students. An increase in the number of participants would allow for generalization of the results and would also better reflect the population of students taking college composition as a whole. More participants would have allowed me to determine significant differences with greater clarity. Finally, future studies need to continue to gather student views and perspectives as a source of data in looking at the effect of retrospective memories of previous grammar instruction. I would highly recommend NoRedInk. It could be very useful for teachers, who are less comfortable teaching grammar, because of the differentiated, targeted instruction.

Future teacher-action research studies are need to address whether digital platforms and algorithmic adaptive learning systems like NoRedInk might improve students' knowledge of grammar, as well as the pros and cons of adaptive learning. It

would also be interesting to address what kind of students might benefit from digital platforms and algorithmic adaptive learning systems like NoRedInk.

NoRedInk is an educational trend that may continue to develop in the higher education space. If students' attitudes about grammar change because they enjoy using NoRedInk, could this more positive attitude—as a result of acquired confidence in their knowledge—lead to more engagement in writing? Could an increase in writing have an impact upon students' writing?

Conclusion

There is an increasing need to incorporate technology in the classroom. “English teachers must embrace a new role: We must advocate for digital literacy, not just technology, in a way that reconceptualizes our discipline. We must dump the dittos, throw out the workbooks, and remix our teaching for a digital age” (Hicks & Turner, 2013). My study presented a synopsis of findings on how the use of a digital platform can revolutionize the teaching of grammar. My central focus was to examine how students experience NoRedInk in the context of a community college writing class and whether there is a relationship between students' attitudes towards grammar and their performance on the digital platform.

The data was collected using a mixed-methods approach. The sample population was a community college in Connecticut. Data was gathered through one-on-one interviews, journal entries, and student performance on the NoRedInk platform. Once the data was gathered, the information was transcribed and coded. As stated in chapter one, past research indicated that integrating technology increases student motivation and improves student learning. This study's findings are essential for the current body

of research on technology in the writing classroom. The digital platform, NoRedInk, allows for several distinct types of implementation. A valuable tool at any level of competency, NoRedInk can be utilized for whole-group instruction, small-group instruction, leveled differentiation, and self-directed learning.

Conducting this study, reflecting on the data, and writing my dissertation caused me to reflect upon my own approach to teaching grammar. Examining my students' pre-existing attitudes towards grammar instruction reinforced my belief that a teacher's demeanor has considerable influence upon their students. I plan to continue to use NoRedInk in my composition courses. I find that it works very well, at the college level, in a self-directed learning environment. NoRedInk provides ample opportunities for practice, with almost 250 lessons, covering 52 topics. Students are engaged by the digital platform, and they receive immediate feedback and support. The success of NoRedInk and its potential in the classroom warrants ongoing evaluation and further research.

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