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ADOLESCENT WRITING INSTRUCTION: A RETURN TO THE SENTENCE

A dissertation submitted in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

to the faculty of the

DEPARTMENT OF EDUCATION SPECIALTIES

of

THE SCHOOL OF EDUCATION

at

ST. JOHN'S UNIVERSITY

New York

by

Toni-Ann M. Vroom

Submitted Date 5/7/2021	Approved Date <u>5/19/2021</u>
Toni-Ann M. Vroom	Dr. Brett Elizabeth Blake

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ABSTRACT

ADOLESCENT WRITING INSTRUCTION: A RETURN TO THE SENTENCE

Toni-Ann M. Vroom

The ability to write well is inextricably linked to reading comprehension, acquisition of content knowledge, and college and career readiness. Many adolescent students, especially those from economically challenged (EC) households, struggle in their ability to communicate in writing, especially in writing to explain or inform across subject areas. While high school students are expected to produce compositions and research papers, they often need the most support at the single sentence level. The purpose of this qualitative study was to explore the characteristics of students' writing in a high school serving students from predominantly ED households in a large urban setting, a school that implemented a method of scaffolded and embedded writing instruction across all subject areas. This study was framed by sociocultural theory (Vygotsky, 1978), cognitive load theory (Sweller, 1988), and the capacity theory of writing (McCutchen, 1996). Content analysis of historical student and teacher-created documents was used to examine the characteristics of writing composed by 79 ninth grade students before and after four months of exposure to the Hochman Method sentence-level scaffold, and to explore educators' perceptions of the impact of the writing instruction on their students' writing as well as their own practice. An inductive analysis of educator interviews was used to provide context for the student and teacher document analysis. Direct participants included two teachers and one instructional coach. This study extended previous research about embedded grammar instruction and writing across content areas. Limitations

included the inability to interview students and time between the phenomenon and educator interviews due to school-based challenges posed by the COVID-19 coronavirus pandemic. Findings highlight the importance of students' command of the sentence in expository writing and the impact of embedding writing instruction in the content areas. Further research should be done to investigate the impact of embedded, sentence-level writing instruction on the writing of adolescent students, including English Language Learners. Recommendations for educators and policymakers are discussed.

Keywords: discrete grammar instruction, embedded grammar instruction, scaffolding, sentence-level instruction, sentence combining, content area writing

DEDICATION

To Kenneth, Luke, and Anthony, my greatest blessings who continually make the extraordinary in life possible.

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I would like to thank Dr. Brett Elizabeth Blake, my dissertation chair, for supporting me through every stage of the process and for opening my eyes to another way of seeing the world. Without her wisdom, this study would not have been the same.

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Like other professional milestones in my life, I was encouraged by my mentor to pursue this doctoral degree. For this, and so many other things, I am eternally grateful and driven to pay her kindness forward.

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I would like to express my endless appreciation for my thought partner and dear friend, Dina Zoleo. Achieving this goal together, like others along our long journey, made it even more special, and I look forward to what the future holds as we continue on our path.

I owe my best thanks to my family. I am grateful to my grandparents for instilling confidence in me and teaching me the value of hard work. I thank my parents Frances and Anthony, both teachers, who taught me about the importance of education and have

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CHAPTER 1: INTRODUCTION

While communication can take many forms, perhaps the most powerful, yet cognitively challenging of them all, is writing. Among other subskills, writing requires the ability to generate, organize, express, and transcribe one's thoughts in a way that someone else can understand. When a writer sits down, pen in hand or fingers on keyboard, they cannot rely on their tone of voice, gestures, or expressions to convey their message. Instead, they must choose carefully the words and phrases that will best achieve their purpose for their intended audience.

In American schools, learning standards often define literacy behaviors and benchmark expectations based on a view of reading and writing as neutral processes (Alvermann & Moje, 2013). Some may consider literacy outside the bounds of the traditional concepts of reading and writing, situating it as a social practice that varies from one context to the next (Alvermann, 2011). For those that hold the latter view, many students, despite being "literate" in other contexts, are identified as "illiterate" or "below grade level" if they do not meet the expectations set forth in the learning standards used in schools.

Across the United States, many adolescent students are not meeting grade-level writing standards, especially in expository writing, writing to explain or inform (NAEP; U.S. Department of Education, 2011). By the time they reach high school, students are expected to write at length, but often need the most support at the single sentence level (Scott & Balthazar, 2013). Because the ability to write well is inextricably linked to students' reading comprehension, acquisition of content knowledge, and college and

career readiness, it is critical that secondary teachers be prepared with effective writing strategies.

One way schools have addressed students' substandard writing skills is by embedding a scaffolded method of writing instruction across subject areas. One such method, the Hochman Method, scaffolds writing instruction, starting at the single-sentence level (Hochman & Wexler, 2017). Students first practice producing single sentences using strategies that build in complexity (e.g., writing in the four sentence types, using conjunctions, expanding sentences), before building to single-paragraph planning, writing, and revising, and later, composition planning and writing (Hochman & Wexler, 2017). Within the method, students are taught how to use grammatical and organizational structures found frequently in written text. Given the demands that writing places on students' cognitive processes, a scaffolded approach focusing at the single-sentence level may alleviate the cognitive burden and result in better overall quality of writing.

Purpose of the Study

The purpose of this research was to explore the characteristics of the writing produced by ninth grade students from an urban high school that implemented the Hochman Method of expository writing instruction and teachers' perceptions of the impact of the writing instruction on their students' writing as well as their own practice.

Statement of the Problem

While the ability to write clearly and coherently is essential in both college and career, many adolescent students across the United States are not meeting grade level writing standards (ACT, 2019; NAEP, 2011). According to the most recent National

Assessment of Educational Progress Writing exam results, approximately 75% of students in eighth and twelfth grade did not demonstrate proficiency in writing to explain, persuade, and convey an experience (NAEP, 2011). The results of students from low-income households were even more startling; only 12% of eighth grade students whose families were eligible for the National School Lunch Program performed at a proficient level (NAEP, 2011).

As students have demonstrated the need for effective writing strategies, many, if not most, teachers enter the classroom inadequately prepared from their pre-service training to teach students to compose (Kiuhara et al., 2009; Graham & Troia, 2016). The lack of teacher preparation may account, in part, for the lack in student preparedness for the demands of writing in high school and beyond. Other factors, including the cognitive demands of writing and the complexity of writing about subject area content, may explain why some high school students struggle. Even though high school students are expected to produce compositions and research papers, it has been found that they often need the most support at the single sentence level (Scott & Balthazar, 2013). As a result, their attempts at extended writing may be compromised as a term paper, essay, or even a single paragraph is only as good as the sentences that comprise it.

Positionality

Inherent in qualitative research is the centrality of the researcher to their study, and, as a result, their subjectivity. As stressed by Banks (1998), researchers should "strive for objectivity but acknowledge how the subjective and objective components of knowledge are interconnected and interactive" (p. 6). A researcher's background, experiences, and perspectives can drive their research interests, questions, and theoretical

framework (Agee, 2009). Furthermore, a researcher interprets, understands, and derives meaning based on their position within a study (Bogdan & Biklen, 2003). In examining my positionality, I acknowledge that my prior experience as a high school social studies teacher as well as my current work leading an educational non-profit organization will likely shape my study.

My career in education began as a social studies teacher in an urban high school in a large metropolis. I taught students of ethnically and culturally diverse backgrounds, with approximately 20% of students classified as English Language Learners. In addition, 80% of the students across the school qualified for the free or reduced lunch program, categorizing them as economically disadvantaged.

My eleven years of teaching spanned the time before and after the state's adoption of the Common Core State Standards (CCSS), which increased expectations for what students should know and be able to do by the time they reached high school. According to the expectations set forth in the standards, over 80% of our school's incoming students were reading below grade level. When the city designated the school as "underperforming", the school leadership, under the threat of closure, had the entire staff trained in an inquiry approach. The approach entailed identifying skills in three categories: skills that our students could do, could almost do, and those skills out of reach. By leveraging what students could do independently, and targeting what was attainable with support, the theory held that students could, in time, progress to the more challenging skills.

To identify the three categories of skills, we studied student writing samples and other classroom artifacts, performed, transcribed and coded low-inference classroom

observations, and aggregated data from state assessments. After numerous inquiry cycles indicated that students struggled in skills associated with academic writing, our school adopted a scaffolded methodology of expository writing instruction, developed by Hochman (Hochman & Wexler, 2017). The Hochman Method begins by explicitly teaching a scaffold of strategies at the single-sentence level, and progresses to single-paragraph planning and writing before building to essays and research papers (Hochman & Wexler, 2017). After a couple of years of implementation of the Hochman Method across all subject areas, including physical education and elective classes, and in all grades, students' performance on internal writing assessments and state standardized assessments improved significantly. Consequently, our school's success became the subject of a widely-read magazine article that brought national and international attention to the school.

Anecdotally, I noticed a change in my students' ability to read and communicate, both in writing and orally, in my social studies content. While writing was always an expectation in my class, it was after adopting the Hochman Method that I shifted from assigning to teaching writing. Three years after my own classroom implementation, I became the school's Writing Coordinator, supporting teachers across subject areas in embedding the Hochman Method into their curricula.

As more schools and districts became interested in the Hochman Method, a non-profit organization was founded to train teachers and support schools and districts in their implementation. At that point, a colleague and I left our school positions to become founding members of the organization, which we currently co-lead as its Executive Directors.

My experience as both a high school teacher who incorporated the Hochman Method, and the leader of a nonprofit that supports educators in doing the same, has shaped my research interests and theoretical framework. Mindful of my positionality, I held firm with Banks' (1998) assertion: "Acknowledging the subjective components of knowledge does not mean that we abandon the quest for objectivity" (p. 6). Rather, through reflexivity, the "process of exploring the ways in which researchers and their subjectivities affect what is and can be designed, gathered, interpreted, analyzed, and reported in an investigation" (Gemignani, 2016), I strove to be reflective of my position within the study and utilized a research design to mitigate my preconceived notions. For example, in the current study I was mindful when analyzing the student writing samples, a task I've practiced as a teacher and in my non-profit, to avoid "looking" for certain attributes and patterns based on preconceived notions. Therefore, I decided to code the writing samples inductively, or derived from the data (Saldana, 2009), rather than approaching the data deductively with pre-set codes.

Theoretical Frameworks

As I sought to examine the impact of a scaffolded method of instruction, the current study was framed by sociocultural theory (Vygotsky, 1978). The need for a scaffolded method of instruction stems from the cognitive demands of writing. Therefore, cognitive load theory (Sweller, 1988) and the capacity theory of writing (McCutchen, 1996) also underpin this study.

Sociocultural Theory

Sociocultural theory posits that learning is dependent on the context, culture, and social interactions of the learning activity (Rueda, 2011). At the heart of sociocultural

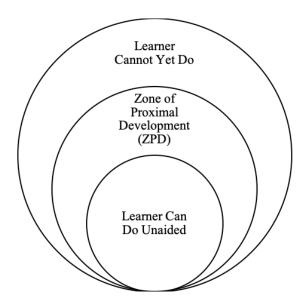
theory is the role of language and social interaction in the development of humans' cognitive abilities (Gee, 2001). Writing and reading require the ability to construct meaning, and language facilitates that ability (Lenski, 2002). Famed sociocultural theorist Vygotsky (1978, 1986) maintained that a young child, or less experienced individual, learns language, behaviors, and knowledge from an older, more experienced individual. Based on this sociocultural premise, in the school setting, the teacher plays an integral role; their actions and use of language can foster students' literacy development and encourage their self-efficacy and motivation.

One distinguishing feature of socioculturalism is the role of the "expert," or "more knowledgeable other" (Vygotsky, 1978), in scaffolding the learning of "novices" (Reyes & Azuara, 2008). In the school setting, scaffolding, a metaphor for the temporary supports that are removed as students progress to mastery, may include direct instruction, teacher modeling, breakdown of a larger a skill into its smaller components, and strategy instruction. In the classroom, the teacher serves as the "more knowledgeable other" (Vygotsky, 1978), having the expertise and ability to modify instruction and provide the supports that students need to move from that which they cannot do independently, to what they are able to do with guidance.

Scaffolding does not entail merely meeting a student at their current level of ability, but providing students with work of "controlled complexity... beyond the child's current level of attainment but not so far beyond that he is able to 'unpack' or comprehend the suggestion or instruction being made" (Wood et al., 1978, p. 132). This area between what a learner cannot yet do and can do unaided is a phenomenon described by Vygotsky (1978) as the zone of proximal development (ZPD).

Figure 1

Visual Representation of the Zone of Proximal Development



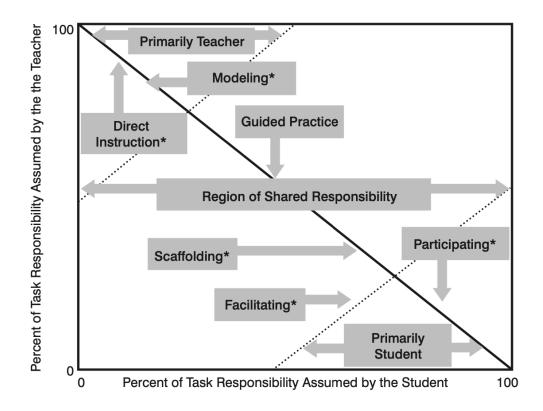
Within the ZPD, learning can take place with guidance from a more experienced individual (e.g., a parent or teacher). Mediated learning involves the instruction and interaction between teacher and student that occurs within the ZPD (Lenski, 2002). For example, teachers can incorporate strategy instruction to support students' processing and production of text (Lenski, 2002). In this research, I examined the impact of sentence-level writing strategies on adolescent students' writing; strategies at the sentence level can serve as a scaffold for students to write extended responses and process the content that they are reading and learning.

Gradual release of responsibility theoretical model. In accordance with Vygotsky's (1978) belief that learning can be scaffolded is Pearson and Gallagher's (1983) gradual release of responsibility (GRR) theoretical model. GRR posits that as they acquire skills through scaffolded instruction, students transition to working independently as responsibility gradually transfers from the teacher to the student (Pearson & Gallagher,

1983). Classroom instruction may initially include direct teaching and modeling of a skill, followed by whole-class practice until students are ready to practice independently. This model is recursive; responsibility will continue to cycle back to the teacher as new skills are introduced, or based on students' need for additional support.

Figure 2

Updated Gradual Release of Responsibility Model (Pearson & Cervetti, 2017)



Cognitive processes of writing. One reason why students may benefit from learning to compose through a scaffolded method is because of the demands writing places on distinct cognitive processes (Flower & Hayes, 1980; Rubinstein et al., 2001; Watson et al., 2016). As a "complex, multifaceted, and purposeful act of communication" (NAEP, 2011), writing requires the brain to manage and synchronize the writer's executive functions, including working memory. It is believed that when a student is

tasked with a writing assignment that exceeds the capacity of their working memory, they struggle and may be unsuccessful (McCutchen, 1996; Sweller, 1998). By scaffolding instruction, teachers can support students' working memory (Smith et al., 2016).

When a student writes, whether they are transcribing or generating ideas in print, they must be able to pay attention to the task at hand; plan; retrieve, manipulate, and hold information; inhibit intrusion; and self-monitor, all behaviors directed by cognitive processes known as executive functions (Flower & Hayes, 1980; Watson et al., 2016).

Often, some or most of these behaviors occur simultaneously (Smith et al., 2016).

Writing taxes one executive function in particular: working memory (Kellogg, 2001). When a student constructs a written response, multiple acts must be performed simultaneously. They must hold and manipulate information while drawing on their ability to handwrite, spell, and follow the rules of grammar and conventions. In addition, they may be considering audience, purpose, syntax, and semantics. At the same time, they must be able to shift their attention periodically to their content knowledge, which may be stored in their long-term memory (Olive, 2011). Working memory is the system that allows for the temporary storage of information while that information is manipulated (Olive, 2011). It is believed that there are different kinds of working memory resources that are taxed during the writing process (Kellogg, 2001; McCutchen, 1996). For example, sentence-level writing, a focus of the proposed study, may tap into a writer's phonological (verbal) store, but first, the generation and planning of ideas rely on visual and spatial stores (Kellogg, 2001).

The limited capacity of working memory is well documented (Hoskyn & Swanson, 2003; Kellogg, 2001; McCutchen, 1996; Sweller, 1998). Unlike long-term

memory, which can store and organize massive, or seemingly limitless, amounts of information (Brady et al., 2008), working memory is limited in terms of duration and capacity (Cowan, 2008). These limitations have given rise to various theories, including the cognitive load theory (Sweller, 1988) and the capacity theory of writing (McCutchen, 1996). According to cognitive load theory, learners struggle when tasks exceed their fixed cognitive capacity, and imposing high cognitive demands can impede a learner's ability to commit information to long-term memory (Sweller, 1988). The capacity theory of writing posits that writing well requires the successful management of one's working memory capacity (McCutchen, 1996). Writing quality has been associated with students' working memory spans (McCutchen et al., 1994). The more efficient or automatized a writing skill or process is (e.g., spelling), the more attention can be paid on higher-level writing processes (e.g., revision). Thus, beginning writers typically spend their cognitive efforts on the act of transcribing, and are less likely to plan or consider their audience, unless they receive instruction or support by the teacher (McCutchen, 1996).

While students may become more efficient in transcribing before entering middle school, the various higher-level processes associated with text generation (i.e, semantics and organization) may be cognitively burdensome, even for adolescent and adult writers (McCutchen, 1996). In addition, the cognitive effort of writing for students in middle and high school content-area classes may be affected by their domain knowledge (Kellogg, 2011). As working memory can tap into knowledge stored in long-term memory (Ericsson & Kintsch, 1995; McCutchen, 2000), teachers can relieve some of the cognitive burden that writing places by scaffolding writing instruction, teaching simpler skills first and segmenting longer writing assignments (Smith et al., 2016).

Significance of the Study

Although literacy encompasses both reading and writing, it can be argued that the research community, the national government, and, by extension, the school community, have paid more attention to the former. In 2003, the National Commission on Writing for America's Families, Schools, and Colleges published *The Neglected 'R': The Need for a Writing Revolution*, a report that blasted the state of American students' writing and the lack of attention paid to its instruction. This report influenced the development of the meta-analyses *Writing Next* (Graham & Perin, 2007) and *Writing to Read* (Graham & Hebert, 2010), both of which included recommendations of evidence-based writing strategies and calls for future research in the area of writing instruction.

With many adolescent students not meeting grade level literacy standards, it is reasonable that they can benefit from sentence-level instruction. Research on embedded, scaffolded writing instruction at the secondary level is limited, and recent research on sentence-level instruction in those grades is especially sparse. In published studies, there are few empirically validated sentence strategies beyond sentence combining (Saddler et al., 2008). Furthermore, because most studies have involved elementary students, there is limited recent research about sentence-level instruction embedded in high school subjectarea classes (e.g., social studies and science), where writing can pose an even greater challenge (Kellogg, 2011). The current study seeks to address a gap in the extant literature by analyzing the characteristics of ninth grade students writing upon entering an urban high school that serves students predominantly from economically disadvantaged households, and how that writing changed after receiving embedded, scaffolded writing instruction focused at the single-sentence level.

Because high school students are expected to write across subject areas, sentence-level instruction that is embedded not only in English Language Arts, but also history, science, mathematics, etc., deserves attention. In the strategy of sentence combining, students manipulate given sentences that may or may not be related to the content they are learning. While there are benefits to that manipulation of language, students are not necessarily demonstrating content understanding, nor generating original thoughts. Embedding sentence practice in classroom content may help students process and retain new concepts they are learning, and better be able to generate ideas in writing (Langer & Applebee, 1987; Hochman & Wexler, 2017). In addition to analyzing documents produced by students and their subject area teachers, I interviewed educators to understand their experiences and perceptions of incorporating sentence-level instruction into their content area practice.

A qualitative analysis of historical student and teacher documents from a high school that 'returned to the sentence' can expand our understanding of literacy in the secondary classroom.

Research Questions

Qualitative research is a process of continuous questioning (Creswell, 2007). As the qualitative researcher seeks to understand an experience or phenomenon from the perspectives of others as well as their own positionality, questions may evolve over the course of a study (Agee, 2009). While some researchers conducting inductive inquiry do not fully develop their research questions until they have collected data (Agee, 2009), I developed the following research questions to guide this study:

- 1. What were the characteristics of the writing produced by ninth grade students from Economically Challenged (EC) households when they entered high school?
- 2. How did the writing produced by ninth grade students from EC households change after receiving four months of the Hochman Method sentence-level writing strategies?
- 3. How do content area teachers describe their experience incorporating the Hochman Method of writing instruction into their practice?
- 4. What were the teachers' perceptions of their students' writing before and after learning the Hochman Method strategies?

Definition of Terms

Discrete grammar instruction. Also referred to as "traditional" grammar instruction, is grammar instruction taught through isolated skills lessons (e.g. sentence diagramming), including the teaching of grammar rules and memorization of definitions of grammatical terms (Collins & Norris, 2017; Hillocks, 2005; Langer & Applebee, 1987).

Embedded grammar instruction. Grammar taught in the context of students' own writing (Collins & Norris, 2017).

Hochman Method. A method of expository writing instruction developed by Dr. Judith C. Hochman that scaffolds, or builds, from single-sentence level to the composition (Hochman & Wexler, 2017).

Scaffolding. Help or supports provided by the teacher or a more capable peer to aid students within their zone of proximal development (Wood et al., 1976).

CHAPTER 2: LITERATURE REVIEW

Introduction

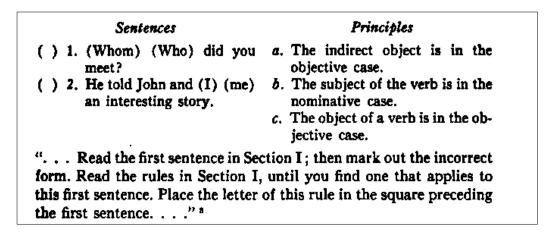
It has been found that less-skilled writers tend to struggle with composing syntactically complex sentences (Hunt, 1970; Saddler et al., 2008). Despite the staggering number of adolescent students writing below grade level (NAEP, 2011), sentence-level writing instruction is not a component of most secondary level classrooms today (Graham & Harris, 2019). However, sentence construction exercises were commonly found in the traditional grammar instruction of the late 19th through mid-20th centuries (Connors, 2000). More recently, studies have supported the effectiveness of embedded writing instruction, including sentence and strategy instruction, in improving students' writing, reading, and content understanding. This review of the literature begins with an overview of the historical development of sentence-level writing instruction in the United States since the mid-20th century. Next, the review explores research related to the impact of sentence-level writing instruction on students' writing, reading, and content learning. Last, the chapter concludes with a description of the Hochman Method of scaffolded, embedded expository writing instruction, the method used by the participants of this study.

Historical Development of Sentence-Level Writing Instruction

While most secondary classrooms in the United States today do not incorporate explicit sentence-level writing instruction, (Graham & Harris, 2019), it was typical for textbooks of the 19th through mid-20th century to include chapters on sentence grammar (Schweiger, 2010). These chapters focused on the classification and categorization of sentence types and functions, grammar rules and definitions, and exercises for sentence

parsing and constructing (Connors, 2000; Fries, 1940; Schweiger, 2010). For example, linguist Fries (1940) included sentence grammar sections in his recommendations for teaching the "correct" usage of English, as illustrated in the example below:

Figure 3
Sentence Grammar Activity (Fries, 1940)



By the early 1960s, a movement against the "old workbook 'drill and kill' exercises" (Connors, 2000, p. 115) had grown. It has been found that this movement may have been influenced by a theoretical shift that occurred in the 1950s from behaviorism to cognitivism in the fields of psychology and linguistics (Yilmaz, 2011). Behaviorism, a theory popularized in the 1930s, emphasized the study of observable events and behaviors, which were believed to be shaped by response to stimuli (Yilmaz, 2011). Thus, from a behaviorist perspective, language development is the result of environmental influence and manipulation. The shift to cognitivism, which focused on the unobservable functions and processes of the mind, influenced the way researchers thought of language (Connors, 2003). Chomsky (1957), whose theories on language and political views remain controversial to this day, influenced the application of cognitive psychology to linguistics. His theory of nativism, which posited that children are born with an innate

predisposition to acquire language, stood in stark contrast with the behaviorist perspective that dominated linguistics the decades prior (Orelus & Chomsky, 2014).

The Christensen Method

From a cognitive perspective, the use of "drill and kill" exercises found in traditional grammar instruction oversimplified the complex process of language development; from a social cognitive perspective, the exercises were inauthentic (Yilmaz, 2011). In 1963, University of Southern California professor Christensen published "A Generative Rhetoric of the Sentence," which lamented how the sentence instruction found in handbooks did not reflect the types of sentences written by contemporary authors, nor encouraged students to develop their own ideas. Christensen (1963) made a case for a new way to approach sentence-level instruction: "We need a rhetoric of the sentence that will do more than combine the ideas of primer sentences. We need one that will *generate* ideas" (p. 155).

Christensen (1963) is remembered for his approach to writing instruction known as *generative rhetoric*, in which students developed *cumulative sentences* by adding modifying phrases and clauses to a main clause (p. 156). Because Christensen (1963) believed the modifier to be "the essential part of any sentence" (p. 165), having students add phrases and clauses to given sentences was an authentic way to teach composition. In the example of generative rhetoric below, written by one of Christensen's (1963) students, a verb clause (identified as *VC*) was added to modify the main clause of the sentence.

Figure 4

Sentence Constructed through Generative Rhetoric (Christensen, 1963, p. 158)

(1) The flame sidled up the match, driving a film of moisture and a thin strip of darker grey before it^{2-VC}.

Although it was popularized in the 1960s, only a few small-scale studies of generative rhetoric were performed, with inconclusive results (Faigley, 1978). In 1978, a full scale study was conducted to test two hypotheses: that generative rhetoric instruction would result in a quantitative increase in syntactic maturity and a qualitative increase as measured by a holistic method of rating (Faigley, 1978). In the study, essay writing of eight sections of college freshmen, four control and four experimental sections averaging 17 students each, was analyzed before and after receiving *generative* writing (treatment) or traditional writing instruction (control). An analysis of pre-test essays on three measures of syntactic maturity [words per T-unit (a measure defined later in this section), clauses per T-unit, and words per clause), found no significant differences between the groups on any of the three measures (Faigley, 1979). After one semester, treatment sections outperformed the control quantitatively on measures of clause length, T-unit length, and words in final free modifiers; the only measure with no significant difference was clauses per T-unit (Faigley, 1979). Qualitatively, students who received generative rhetoric instruction demonstrated greater quality in overall writing; raters noted that students in the treatment groups made varied rhetorical choices in their sentences and well-developed structural patterns not only at the sentence-level, but in their compositions as well (Faigley, 1979). Faigley (1979) attributed the phenomenon to the structures that students learned at the sentence-level, with the sentence serving as a

microcosm of the composition. Faigley (1979) concluded that focusing on sentences, the "manageable segments of writing" (Faigley, 1979, p. 180), could be a more efficient way to teach composition.

A parallel can be drawn between Christensen's concept of generative rhetoric and Chomsky's theory of generative grammar. Chomsky described grammar as a way of generating sentences, the most basic form of which is the simple, declarative, active *kernel* sentence (Thomas, 1962). Chomsky theorized that all other sentences are *transformations* of kernels, kernels that have added elements (such as adjectives, adverbs, phrases, and/or clauses), or kernels whose elements have been rearranged to form other sentence types (i.e., imperative, interrogative, exclamatory) or change to passive voice (Thomas, 1962). Both Christensen's generative rhetoric and Chomsky's transformational-generative grammar were significant in understanding students' writing development and developing an approach towards instruction.

Imitation Exercises

Another sentence-level writing strategy practiced in the 1960s and 1970s was sentence imitation (Connors, 2000). The theory behind sentence imitation exercises is that students can learn syntax, structure, and punctuation by studying and emulating another writer's style into their own (Butler, 2011). In 1977, a study was conducted to compare the effectiveness of sentence imitation and sentence combining, another sentence strategy described in the following section. Students from the two treatment groups (imitation and combining) wrote pre and post expository essays, which were given a rating based on the number of flaws in organization, meaning, logic, style, mechanics, punctuation, and usage (Hake & Williams, 1979). Based on a statistically

significant decrease in flaws in logic and style for students in the imitation treatment, it was concluded that imitation exercises were more effective than sentence combining exercises for expository writing (Hake & Williams, 1979).

Critics of imitation viewed the exercises as inauthentic, inorganic, and stifling (Gruber, 1977; Shields, 2007). Supporters, on the other hand, noted that the exercises encouraged students to develop original ideas while following the form used in models. In *Servile Copying* (1977), Gruber argued that "by paradox, 'servile copying' becomes an organic method after all, for it teaches that in good writing, form and content are inseparable" (p. 496-497).

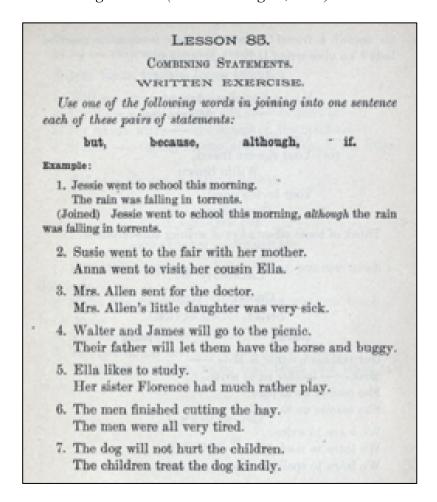
Measuring sentence complexity. Although the approaches differed, the ultimate goal of both generative rhetoric and imitation exercises was an improvement in overall writing quality (Burgess, 1963; Connors, 2000; Crowhurst, 1983; Zamel, 1980). What was debatable, however, was how to measure it. While some studies employed a holistic approach to assessing overall quality (O'Hare, 1973), others turned to quantitative measures. One attribute that was positively correlated to writing quality was syntactic complexity, but it was debated how complexity could be measured (Crowhurst, 1983). Hunt (1970) described the challenges of using sentence length, rate of sentence variety, or clause length as measures of syntactic development. As a result, he developed the T-unit, or "minimal terminal unit," a measure defined as "one main clause plus any subordinate clause or nonclausal structure that is attached or embedded in it" (p. 4).

Sentence Combining

Sentence combining is an exercise where students combine multiple sentences into one, drawing upon their ability to use pronouns, conjunctions, phrases, clauses, and

embedded punctuation (Saddler, 2012). Although popularized in the 1960s, sentence combining had been a component of traditional grammar instruction for decades prior.

Figure 5
Sentence Combining Exercise (Wilson & Sargent, 1889)



While sentence combining predated the mid-20th century shift in writing instruction, the 1960s "renaissance" of sentence combining can be attributed to the influence of Chomsky's transformational-generative grammar (Saddler, 2012) and Hunt's (1970) development and studies on the T-unit. Building on previous studies, Hunt (1970) sought to determine if sentence combining increased as students matured. In a study of 250 students, 50 students each across grades four, six, eight, ten, and twelve, it was found

that the mean T-unit length of students' sentences increased with age. Based on Hunt's (1970) findings, as well as similar findings from other studies (Hunt, 1965; O'Donnell et al., 1967), sentence-combining exercises have become a popular focus of writing research.

Sentence combining continues to be the most researched sentence-level writing strategy; since 1980, over 80 studies have demonstrated the impact of sentence combining on students' syntactic maturity (Berninger et al., 2011; Datchuk et al., 2015; Saddler et al., 2008; Saddler, 2019). Through sentence combining, students learn grammar and usage in context (Berninger et al., 2011; Collins & Norris, 2017; Saddler et al., 2008).

Sentence combining can improve students' writing across a variety of modes of discourse and has been shown to improve students' revising skills (Berninger et al., 2011; Saddler et al., 2008). In a study comparing the impact of sentence-combining instruction to traditional grammar instruction on the writing of fourth grade students with and without disabilities, students practicing sentence combining produced more complex sentences (Saddler et al., 2008). Additionally, the sentence-combining group transferred the grammatical skills they learned to other contexts. This supports Collins and Norris' (2017) finding that students learning grammar in the context of writing are more likely to transfer the skills they learn to their own writing. Similarly, a longitudinal study by Berninger and colleagues (2011) of a group of students from grade one through seven found sentence combining to be especially beneficial as writing requirements in curricula increased through the grades. While many single clauses continued to appear after the

intervention, the number of complex syntactic constructions increased as students progressed from grades one through seven (Berninger et al., 2011).

Although many studies have supported the use of sentence combining, the strategy has faced some criticism. Some have regarded sentence combining as akin to the inauthentic, "drill and kill" grammar exercises of traditional grammar instruction (Connors, 2000). Because the strategy, by design, provides students with the content to combine, some have cited the lack of student-generated content as a shortcoming (Zamel, 1980). Others, however, have considered that a strength; by providing the content, students can focus all of their attention on transforming the substance (O'Hare, 1973; Saddler, 2012). From the sociocultural theoretical perspective underpinning the proposed study, the sentence combining strategy can serve as a scaffold to writing more complex sentence structures. Based on the capacity theory of writing, providing content for students to combine can allow students to devote their limited working memory resources to practicing grammar and usage.

Embedded Grammar Instruction

"(k)nowledge of form does not translate into the strategies and skills necessary to wrest from the subject matter the ideas that make up a piece of writing" (Hillocks, 2005, p. 238).

Grammar forms the basic rules and structure of written language. In order for students to communicate clearly and coherently in writing, they will need command of English grammar. The traditional approach to writing instruction, identified in the literature as *discrete* (or *traditional*) grammar instruction, includes isolated skills lessons (e.g. sentence diagramming), the teaching of grammar rules, and memorization of

definitions of grammatical terms (Collins & Norris, 2017; Hillocks, 2005; Langer & Applebee, 1987). Embedded grammar instruction, an alternative approach, entails the teaching grammar in the context of students' own writing.

Research on the effectiveness of both approaches to grammar instruction can be found in the literature. For example, Collins and Norris (2017) sought to compare the effectiveness of embedded grammar instruction (EGI) and discrete grammar instruction (DGI) on measures of grammatical complexity and gains in spelling, capitalization, and punctuation. The 320 students across grades three through eight who received six weeks of EBI outperformed the DGI group, composing more complex sentences with a greater degree of accuracy. Collins and Norris (2017) concluded that because the embedded instruction students learned grammar rules in the context of their reading passages, they were able to "balance form, function, and meaning" (p. 26).

Similarly, a study by Fearn and Farnan (2007) sought to answer "What is the effect of teaching grammar *in* writing rather than *for* writing?" (p. 72), differentiating the approaches as teaching what words "do", rather than what words "are." Over a five week period, 75 tenth grade students received either functional (embedded) sentence-level grammar instruction or *identification-description-definition* instruction. While there was no significant difference in students' knowledge of grammatical terms for either group, students that received functional grammar instruction significantly outperformed the traditional group in a post-writing sample. Collins and Norris (2017) noted similarly that skills practiced in traditional grammar exercises are not likely to transfer to students' own writing. Thus, memorizing grammatical definitions does not ensure that students will internalize their meaning, and knowledge of grammatical terms does not result in better

writing. From a sociocultural perspective, when writing instruction is authentic and attached to the regular classroom context, students are more likely to internalize and transfer the skills to future writing assignments.

Sentence-Level Writing-Reading Relationship

Reading and writing are related and reciprocal processes (Ahmed et al., 2014; Shanahan, 2019). Though the former is receptive and the latter productive, both are grounded in the written word, require knowledge of sound-symbol relationships, draw upon a student's background knowledge, and place demands on cognitive processes (Shanahan, 2019).

Writing about reading fosters processing and analysis of text (Graham & Hebert, 2010; Langer & Applebee, 1987). Sentence-level writing strategies, including summarization, have been found to improve reading comprehension (Graham & Hebert, 2010). When writing a summary, the reader must hone in on the most essential information from that which is less essential, redundant, or non-essential. That processing of information, along with the generation and transcription of the summary, has been found to be "better than reading it, reading it and rereading it, [and] reading and studying it" (Graham & Hebert, 2010, p. 16).

Students with reading difficulties often struggle at the sentence level; syntax, sentence length, and multiple clauses can hinder comprehension (Scott & Balthazar, 2013; Shanahan, 2019). With the bidirectional relationship between reading and writing at the sentence level (Ahmed et al., 2014), researchers have studied the impact of sentence writing activities on students' reading ability. Sentence combining, which is designed to build students' awareness and ability to manipulate linguistic units of phrases

and clauses (Hughes, 1975; Saddler, 2012), has been found to improve reading fluency (Hughes, 1975) and comprehension (Collins & Norris, 2017). A study of 24 seventh graders that participated in a ten week sentence combining intervention yielded some important findings. A statistically significant relationship between students' syntactic maturity and their reading level was determined (Hughes, 1975). While the greatest gains in reading comprehension were made by the lowest and middle groups, teachers noted large gains for all students in reading fluency (Hughes, 1975). Similarly, a study by Collins and Norris (2017) of students in grades three through eight found that the practice of sentence combining developed students' syntactic awareness, an ability correlated with word recognition and reading comprehension.

Writing as a Learning Tool

"Writing represents a unique mode of learning- not merely valuable, not merely special, but unique" (Emig, 1977, p. 122).

In 1977, Emig supported the thesis above by outlining the ways in which writing differs from reading, speaking, and listening, distinguishing writing from the aforementioned processes for the reason that "so many curricula and courses in English still consist almost exclusively of reading and listening" (p. 122). Numerous studies have examined the unique relationship between writing and learning described by Emig (Graham et al., 2020; Langer & Applebee, 1987).

Writing about what is read in the content areas can help students process and retain content information (Bangert-Drowns et al., 2004; Graham et al., 2020; Klein et al., 2019; Langer & Applebee, 1987). A mixed methods study by Langer and Applebee (1987) demonstrated that the more content was manipulated by writing about it, the more

it was understood and remembered. However, depending on the purpose of the writing task, the amount of information and depth of processing differed. For example, summarizing and note-taking tasks focused students' attention on a text as a whole, but manipulation of the text was superficial. Analytical writing tasks, on the other hand, led to deeper manipulation, but of a more focused section of the text (Langer & Applebee, 1987). While Langer and Applebee noted that writing may not have an effect when content is familiar and already understood, they found that writing about a text ultimately results in better learning than reading alone. These findings support Vygotsky's (1962) view that language serves as a support system for higher cognitive functions. From a sociocultural perspective, writing enables students to construct meaning.

Additionally, Langer and Applebee (1987) found that grammar instruction embedded in content produced superior results on essay writing measures. Hence, combining writing and content has mutually beneficial effects.

Given the quantity of studies conducted around writing-to-learn interventions, various meta-analyses have been conducted to analyze the literature in a systematic manner and determine the magnitude of the effects of writing on learning (Bangert-Drowns et al., 2004). In 2004, Bangert-Drowns and colleagues published a meta-analysis of 48 treatment-control comparisons of writing-to-learn studies conducted across grade levels and subject areas between 1926 and 1998. While the studies varied in terms of intervention and participants, all were conducted in natural school settings. Given the variety, the researchers coded the studies based on factors such as length of intervention, frequency of writing practice, purpose for writing (e.g., to inform, to reflect), form of writing [e.g., short answer, extended writing, creative forms (plays, poems)], and minutes

per writing task. In addition, the authors identified interventions incorporating metacognitive elements, which served as a way to "scaffold aspects of self-regulation" (p. 38).

Effect sizes calculated for academic achievement measures yielded the following findings: 36 of the 48 treatment-control comparisons were positive; effect sizes across studies varied greatly (from -0.77 to 1.48), with a small but statistically significant mean effect (Bangert-Drowns et al., 2004). It was concluded that the effects of writing on learning were moderated by factors such as length of treatment, minutes per writing assignment, grade level, and presence of metacognitive elements. Extended writing tasks produced smaller effects, a phenomenon the authors attributed to the cognitive demands of longer writing assignments as well as the possibility that time teaching content may have been reduced for the sake of writing. Therefore, frequency, not quantity, of writing may be a greater moderator of student learning.

Interestingly, the authors found that writing-to-learn interventions had a low average effect in grades six through eight, years of schooling when students typically participate in content area courses. The authors hypothesized that students' transition to new, domain-specific writing structures used across classes may "interfere with the relationship between writing and learning" (p. 50). However, interventions that encouraged self-reflection and metacognition enhanced student learning.

Many studies have supported the effectiveness of combining strategy and self-regulation instruction (Baker et al., 2009; Graham et al., 2013). Specifically, self-regulated strategy development (SRSD), a model of explicit writing instruction that infuses self-regulation strategies, has been found to be extremely effective (Bangert-

Drowns et al., 2004; Graham et al., 2020; Graham & Perin, 2007). In Graham and Perin's (2007) meta-analysis, the average effect size for SRSD studies was 1.14, indicating a large or strong effect.

Teachers' Perceptions on Writing Instruction

Generally, teachers at both the secondary and elementary levels place value on the importance of writing and writing instruction, yet educators have reported feeling unprepared or not confident to teach it (Brimi, 2012; Brindle et al., 2015; Kiuhara et al., 2009; Street & Stang, 2009).

In a survey of a random sample of 361 high school language arts, social studies, and science teachers, 71% of respondents reported receiving little or no training in their college teacher preparation programs in how to teach writing (Kiuhara et al., 2009). Furthermore, 44% responded that they did not receive adequate preparation in their inservice training (Kiuhara et al., 2009). When comparting survey results across subject areas, language arts teachers reported feeling more prepared than social studies teachers, followed by science teachers. Despite their perceived lack of preparation in teaching writing, 98% of the teachers surveyed agreed that writing is an essential skill for students after high school (Kiuhara et al., 2009).

Lack of preparedness to teach writing was also a theme identified in a qualitative exploratory study of five high school English teachers; in the interviews of the five educators, all responded that they did not receive any training in their teacher preparation programs to teach composition (Brimi, 2012). This included a lack of attention paid to writing instruction in methods courses, which teachers described as based more on teaching literature. According to one teacher, "never did anybody ever teach me how to

teach writing" (p. 67), while another described their college class on teaching writing as "pretty much useless practice of your own writing" (p. 71).

A mixed methods study exploring the impact of teacher education courses on secondary teachers' self-confidence as writers found that teachers' personal experiences with writing as students influenced their perceptions of writing as teachers (Street & Stang, 2009). These histories, coupled with a perceived lack of preparation, was found to impact teachers' confidence in teaching writing.

Similarly, elementary educators have expressed the perception of being unprepared to teach writing (Brindle et al., 2015; Norman & Spencer, 2005). In a survey of a random sample of 157 third and fourth grade teachers, 75% reported receiving little or no training in their college teacher preparation programs in how to teach writing (Brindle et al, 2015). In addition, the teachers ranked their preparation for teaching writing lower than teaching reading as well as math, science, and social studies.

Like their secondary counterparts, writing is deemed an important skill by elementary educators (Brindle et al., 2015; Norman & Spencer, 2005). In a qualitative analysis of written responses composed by 59 preservice elementary teachers, responses indicated an overall positive teacher perception of writing, yet the respondents had a less favorable view of expository writing, the subject of the current study, than creative and personal expression (Norman & Spencer, 2005).

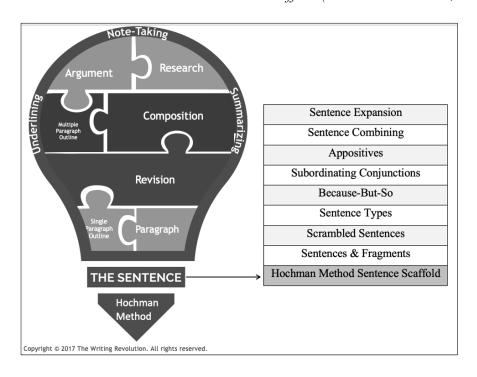
The Hochman Method

Studies on writing strategy instruction have found that when they are taught systematically, strategies are effective not only for struggling adolescent writers, but for adolescent students as a whole (Graham & Perin, 2007). In the current study, I examined

ninth grade students' writing samples composed before and after receiving four months of Hochman Method scaffolded writing strategies. As noted in the diagram below, the Hochman Method is a scaffolded expository writing methodology, beginning at the sentence level, regardless of students grade level (Hochman & Wexler, 2017). As students develop the notion of a sentence, they learn to plan and develop single paragraphs. Students learn to apply the sentence strategies (e.g., using conjunctions, incorporating appositives, sentence expansion) to improve the substance of their writing through revision activities at the sentence and paragraph level. When students demonstrate proficiency at the single paragraph level, they advance to planning and composing compositions. After, students progress to more challenging extended writing tasks, argumentative compositions and research papers. Embedded throughout the method are strategies for note-taking, underlining, and summarizing.

Figure 6

The Hochman Method and Hochman Sentence Scaffold (Hochman & Wexler, 2017)



From a sociocultural perspective, scaffolding writing instruction for adolescent students may enable teachers to meet students within their zone of proximal development and support students in progressing to more syntactically complex structures. In turn, a foundation can be laid for later revision, paragraph, and composition-level. From a cognitive perspective, a *parts to the whole* approach to writing instruction can help alleviate the cognitive burden of writing by focusing on specific skills at a time. By doing so, students may commit the strategies to their long term memory, freeing up space in working memory for new content and skills.

Summary

Developing writers, and students not meeting grade-level writing demands, often struggle at the single-sentence level (Hunt, 1970; Saddler et al., 2008). Embedded sentence-level writing strategies have been found to not only improve students' overall writing quality (Collins & Norris, 2017; Fearn & Farnan, 2007; Graham et al., 2020; Graham et al., 2007; Scott & Balthazar, 2013), but also serve as tools to boost students' reading comprehension (Ahmed et al., 2014; Hughes, 1975; Saddler, 2012) and content learning (Bangert-Drowns et al., 2004; Graham et al., 2020; Klein et al., 2019; Langer & Applebee, 1987). The Hochman Method of expository writing instruction is an approach that both scaffolds and embeds writing instruction, starting at the sentence level (Hochman & Wexler, 2017). In the current study, students who, on average, entered high school writing below grade level, received the Hochman Method sentence strategies during the first half of the school year.

Some may argue that explicit grammar instruction may stifle the writing and creativity of adolescent students. One differing approach to the Hochman Method is the

practice of freewriting, writing quickly for a given period of time without stopping to think about spelling, grammar, word choice, audience, or editing (Elbow, 1973). Elbow (1973) posited that freewriting is more similar to speaking than writing; it is faster and will produce more words, easily. According to Elbow (1973), when students write the way they speak, they are less mindful of their words, freeing up their voice, or "main source of power" in their writing (Elbow, 1973, p. 6). The Hochman Method differs from this approach in its emphasis on teaching students to be mindful of audience and to write using structures that are found more frequently in written text than oral expression (e.g., sentences containing appositives) (Hochman & Wexler, 2017). Students are encouraged to be aware of these grammatical structures as they compose, contrary to Elbow's (1973) advice on grammar, to "never think about it while you are writing" (p. 137). Furthermore, the Hochman Method's emphasis on planning before writing paragraphs and essays stands in contrast to the spirit of freewriting.

While the Hochman Method stresses writing to explain or inform about subject area content, other approaches emphasize the practice of writing about personal experiences or interests (Calkins, 1994). It has been argued that writing about material from one's own life or about topics of personal interest encourages self-expression and helps students develop their own voice (Calkins, 1994). In contrast, the Hochman Method strategies are used to teach students how to write about what they are learning across all content areas (Hochman & Wexler, 2017). Rather than teaching the writing strategies in mini-lessons, the Hochman Method strategies are intended to be practiced throughout a lesson, serving as both a way to improve students' writing and thinking about the subject matter. The Hochman Method may be a more appropriate and effective approach at the

high school level, where writing to explain is a greater focus and expectation than writing to convey an experience (NAEP, 2011, 2017). As described in the previous sections, embedding writing instruction in the context of students' own writing as well as what they are learning can effectively improve student outcomes (Collins & Norris, 2017; Graham et al., 2020, Langer & Applebee, 1987). From a cognitive perspective, building students' repertoire of writing strategies may give them more options, thus enabling their creativity and voice.

Incorporating a scaffolded method of writing strategy instruction, such as the Hochman Method of expository writing instruction, can alleviate the burden that writing places on cognitive processes by leveraging students' skills within their zone of proximal development. As students practice and commit the writing strategies to their long term memory, they may be able to focus more of their attention on the substance of their writing. At the high school level, scaffolded writing strategies can help adolescent students write, read, and think about novel, sophisticated content.

CHAPTER 3: RESEARCH DESIGN

Research Design

Prior to the COVID-19 coronavirus pandemic, I planned to conduct a mixed methods study of the effectiveness of the Hochman Method sentence-level writing strategies on adolescent students' writing, including a quantitative pre and post test phase followed by a qualitative phase consisting of semi-structured interviews with students and teachers. Due to the impact of the pandemic on schools, it became no longer feasible to conduct the planned intervention with students. As a result, I pivoted my study; instead of conducting and examining the results of an intervention, I conducted a qualitative analysis of historical documents produced in an urban high school that has implemented the Hochman Method across grade levels and subject areas.

Research Questions

The research questions that framed the focus of this study include:

- 1. What were the characteristics of the writing produced by ninth grade students from Economically Challenged (EC) households when they entered high school?
- 2. How did the writing produced by ninth grade students from EC households change after receiving four months of the Hochman Method sentence-level writing strategies?
- 3. How do content area teachers describe their experience incorporating the Hochman Method of writing instruction into their practice?
- 4. What were the teachers' perceptions of their students' writing before and after learning the Hochman Method strategies?

Data Analysis

Content (document) analysis is a method of qualitative inquiry that can be used to examine change or development over time, and/or to study a past event or phenomenon (Bogden & Biklen, 2003; Bowen, 2009). According to Bowen (2009), document analysis has been used to compliment other methods or has been used as a method in its own right; in a historical analysis, it is often the main or sole data source. Similarly, Bogden and Biklen (2003) noted that "while their use as an auxiliary is most common, increasingly, qualitative researchers are turning to documents as their primary source of data" (p. 57). In this study, student and teacher-created documents served as two of three data sources that I analyzed systematically to gain insight about a past phenomenon.

Trustworthiness. As outlined by Lincoln and Guba (1985), the rigor or robustness of a qualitative study is dependent on the researcher's ability to establish trustworthiness. Trustworthiness is multidimensional, encompassing the criteria of credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985).

Credibility. In an effort to increase credibility, or "truth value" (Cho & Lee, 2014), I triangulated the data by conducting semi-structured interviews of two teachers and one instructional coach, as well as a content analysis of teacher-created writing activities (documents). Triangulation, combining methods to study a phenomenon, can help a researcher find "convergence and corroboration through the use of different data sources and methods" (Bowen, 2009, p. 28). The interviews and analysis of teacher-created documents were intended to provided context for the student writing samples and to reduce my potential researcher bias as well as the bias inherent in examining one data source (Bowen, 2009). According to the sociocultural theory underpinning the study,

learning is dependent on the context of the learning activity (Rueda, 2011); the interviews and teacher document analysis complemented the student writing data by contextualizing it.

Another way I aimed to achieve credibility is through establishing a semistructured interview protocol with standard open-ended questions that allowed for consistency across interviews with flexibility for participants to discuss a range of topics (Bogden & Biklen, 2003).

Dependability. To enhance the dependability, or consistency, of the data (Cho & Lee, 2014), I engaged in member checking, where I asked the interview participants to review the interview transcriptions for accuracy.

Transferability. In this study, I conducted a content analysis of two sets of writing samples from a school's ninth grade students, the first set of samples written before exposure to the Hochman Method, and the second set written after approximately four months of exposure to the Hochman Method sentence strategy scaffold. I employed purposeful sampling, choosing specific subjects in order to provide a "thick description of the... context, people, actions, and events" (Yilmaz, 2013), thereby increasing transferability to other similar settings.

Confirmability. In addition to the triangulation and member checking, I aimed to ensure confirmability, the extent to which the findings are based on the data, by analyzing the student and teacher documents inductively so that themes and categories could "emerge from the bottom up" (Bogden & Biklen, 2003, p. 6).

Research Site

The two sets of student documents that I gathered and analyzed were written in September 2019 and January 2020 by ninth grade students from "Carson High School," a school in a large urban setting in Northeastern United States. During the 2019-2020 school year, the study site served 416 students in grades nine through twelve. The majority of the students (68%) in the craftsmanship theme-based school were identified as male. As shown in Table 1, the demographic makeup of the student population at the time of the data collection was 63% Hispanic or Latinx, 26% Black, 5% White, 4% Asian, and 2% other. In addition, 5.3% of students were classified as English Language Learners, 1.6% below the borough average. Students with Disabilities made up 26% of the student population, which was 9% above the borough average. The Economic Need Index was 84%, defined as students in families eligible for Human Resources Administration assistance; for context, 68.8% of students across the borough were classified as Economically Disadvantaged. The average English Language Arts performance level of the ninth grade students, as measured by their eighth grade ELA state standardized test scores, was 2.71 out of a possible 4.0, below the minimum proficient level of 3.0. This performance level was 0.45 and 0.28 points less than the borough and city average, respectively.

Table 1

Demographic Information- 2019-2020 School Year

Study Site	Borough	
Gender	Gender	
Male: 63%Female: 37%	Male: 54Female: 26	
Ethnic/Racial Enrollment	Ethnic/Racial Enrollment	
 Hispanic or Lantinx: 63% Black: 26% White: 5% Asian: 4% Other: 2% 	 Hispanic or Latinx: 46% Black: 23% White: 14% Asian: 13% Other: 1% 	
English Language Learners: 5.3%	English Language Learners: 6.9%	
Economically Disadvantaged: 84%	Economically Disadvantaged: 68.8%	
Students with Disabilities: 26%	Students with Disabilities: 17.1%	
English Language Arts Performance Average performance level: 2.71/4.0	English Language Arts Performance Average performance level: 3.16/4.0	

During the 2019-2020 school year, Carson High School was in its second year of partnership with the organization in which I currently work. Through this school partnership, our organization provided professional development in the Hochman Method and onsite support services, which included site visits to assess implementation of the method, review of teacher-created materials to foster fidelity, and assessment of student writing samples at the beginning, middle, and end of the school year. While my organization is in a partnership with Carson High School, I did not serve the study site

directly. I selected Carson High School as the focus of the proposed study to examine, qualitatively, a phenomenon in their ninth grade students' writing performance during the first half of the 2019-2020 school year.

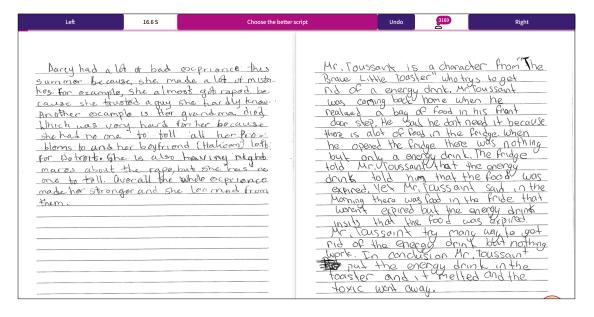
Determining the Research Site

As noted in the student demographics, Carson High School served a high-need student population that, on average, entered ninth grade performing below grade level in ELA. Yet, the students made significant quantitative growth in their writing performance from September 2019 to January 2020 as measured by a beginning-of-year (BOY) and middle-of-year (MOY) benchmark writing assessment.

The benchmark student writing samples were assessed using comparative judgment, an approach to assessment where raters participate in series of comparisons of two writing samples, side by side, and make a holistic judgment as to which is the better piece of writing (Wheadon et al., 2020). After making a judgment between two pieces of writing, another pair is presented to the rater. Sometimes, a rater is provided two new pieces of writing to judge; over time, previously-judged samples reappear to be judged against a different sample. This process was conducted on a web-based platform developed by No More Marking, a UK-based online provider of comparative judgment software.

Figure 7

No More Marking Comparative Judgement User Interface



To prevent bias, student answer sheets are barcoded, scanned and uploaded to the No More Marking site. When a rater is presented with pairs of writing samples, student names do not appear. After an adequate series of judgments are made, scores are determined and scaled using a statistical model (Wheadon et al., 2020), and cut scores are selected to classify student writing performance into five categories: Beginning, Developing, Proficient, Skilled, and Exceptional.

Unlike the traditional form of writing assessment, in which a rater makes a definitive, or absolute, judgement by assigning a score based on criteria found in a rubric, comparative judgement is a holistic approach to assessing writing quality. Traditionally, it is difficult to achieve a high reliability on a writing task using rubric-based methods of scoring (Wheadon et al., 2020). A recent study by Wheadon and colleagues (2020) comparing rubric-based assessment to comparative judgement found comparative judgement to be a more reliable and efficient method of assessment. One significant

difference between the two approaches is the number of times each piece of student writing is assessed. Whereas in standardized writing assessments, student samples graded by rubric are typically read by one to three raters, with comparative judgement, a student sample is assessed a minimum of ten times. Typically, the more a piece of work is assessed, the higher the level of reliability, or agreement (Verhavert et al., 2019). With comparative judgement, an inter-rater reliability of at least 0.65 is acceptable, while a 0.80 is preferred. In this study, the BOY assessments were judged by 15 educators with an inter-rater reliability of 0.85, and the MOY assessments were judged by 17 educators with an inter-rater reliability of 0.90.

In addition, the September 2019 BOY and January 2020 MOY tasks were administered and judged during set assessment windows across all of my organization's partner schools. In order to standardize the results by placing students across schools on the same scale, No More Marking organized the judging sessions so that for any school participating, 80% of their judgements compared samples from their own students, and 20% of the samples judged were of students from other partner schools. To prevent educators from purposefully selecting students from their own school over another, No More Marking ensured that a school's students were never compared with students from another school; rather, every tenth judgement served as a moderation judgement, comparing only students from other schools. To prevent rater bias, school names did not appear on student answer sheets. Thus, the following BOY and MOY results were determined by educators across the nine schools that assessed ninth grade writing during the 2019-2020 school year.

The tables below note the individual school data for the eight schools that are within the same city and the study site; the schools are ordered by the effect size of the average progress made from the BOY to the MOY assessment.

Table 2School-by-School Assessment Results

School	Number of Matched Students (BOY & MOY)	Mean BOY Scale Score (Sept. 2019)	Mean MOY Scale Score (Jan. 2020)	Scale Score Change (BOY-MOY)	Effect Size (BOY-MOY)
School A	607	356.72	358.91	2.19	0.14
School B	207	357.65	362.37	4.72	0.32
School C	78	352.03	358.46	6.43	0.42
School D	68	358.91	371.19	12.28	0.66
School E	52	336.92	350.02	13.1	0.76
Carson H.S.	79	344.76	356.23	11.47	0.84
School F	79	344.2	358.46	14.26	0.95
School G	30	345.87	<i>359.17</i>	13.3	1.29

 Table 3

 Scale Score- Writing Level Correspondence

Writing Level	Beginning	Developing	Proficient	Skilled	Exceptional
Scale Score Range	300-316	317-351	352-369	370-398	399-400

I selected Carson High School as the study site to examine, qualitatively, the phenomenon indicated in the quantitative analysis. Given my positionality, I analyzed the documents inductively to mitigate the influence of my preconceptions, or "theoretical sensitivity" (Glaser, 1978), and allow the data to speak for itself.

Participants

As the primary data for this study were historical documents produced by 79 ninth grade students during the 2019-2020 school year, I did not interact directly with students. Additionally, the teacher-created writing activities that were analyzed in this study were created by ten teachers from the study site, but only two of those ten teachers participated directly in the study through educator interviews.

The participants for the study were two ninth grade teachers and one instructional coach from Carson High School, who I interviewed about their experience incorporating the Hochman Method strategies into their practice and their perceptions on the impact of the sentence-level strategies on their students' writing.

Procedures

I contacted the school principal via email to request permission to conduct the study utilizing historical data from the school (two sets of student writing assessments and a set of teacher-created documents), and to recruit participants to interview through a letter of school recruitment and consent (see Appendix B for the School Recruitment Letter). The criterion for selection of interview participants was educators who taught or observed the ninth grade class during the 2019-2020 school year. I contacted the school's instructional coach via email and discussed by phone the consent letter (see Appendix D for the Instructional Coach Recruitment Letter). I then contacted via email all teachers fitting the criterion for selection with the letter of recruitment and consent (see Appendix C for Teacher Recruitment Letter); three of four educators contacted consented to participate.

Data Collection

In this study, I conducted a content analysis of historical documents, specifically beginning (BOY) and mid-year (MOY) writing samples from ninth grade students produced in September 2019 and January 2020, respectively, as well as samples of teacher-created activities from that same period. After I was granted permission from the school to utilize the data, I accessed the student writing documents through the No More Marking website, where I was able to download the samples into PDF format. The teacher-created documents were accessed through a shared Google Drive folder. After completing the content analyses, I conducted and recorded semi-structured interviews with the two teachers and instructional coach via Zoom teleconference software.

Interview recordings were transcribed for analysis using Trint transcription software and downloaded as a Microsoft Word Document. The transcriptions were cross-checked with the Zoom recordings and corrected for accuracy.

Sources for Qualitative Data Collection

Student writing samples. Student writing samples consisted of the BOY and MOY writing assessments based on open-ended prompts, where students were asked to respond to each in a paragraph. The two prompts read as follows:

BOY prompt (September 2019): Choose a character from a novel, short story, or play. Write a paragraph about how that character changes in the story.

MOY prompt (January 2020): Choose a person you have learned about. Write a paragraph describing that person and their impact.

Both prompts provided an element of choice so that students at varying skill and knowledge levels could access the task. Students could draw upon content they learned at

any point in their schooling, or write about characters or individuals that they were familiar with outside of school. This included writing about a character or individual from a movie or television show, or an individual from their personal life.

Semi-Structured Interviews. Two teachers and an instructional coach were posed open-ended questions (se. Appendix E and F) regarding their perceptions about sentence-level writing instruction at the high school level (Research Question 3) and their perceptions about their students writing before and after learning the Hochman Method sentence strategies (Research Question 4). A semi-structured interview approach with general, open-ended questions was selected to focus the sessions and gather comparable data about the educators' experiences and perceptions, yet allowed for some "latitude to pursue a range of topics and offer the subject a chance to shape the content" (Bogden & Biklen, 2003, p. 95-96). At the onset of all interviews, I informed the subjects of the purpose of the interview and made assurances of confidentiality (Bogden & Biklen, 2003). Responses were used to triangulate the content analysis of students' writing samples and teacher-created documents.

Transcripts. As per the social distancing guidelines set forth by the school system due to the COVID-19 pandemic, and for the safety of all involved, educator interviews were conducted and recorded remotely using Zoom teleconferencing software. Interview recordings were uploaded to Trint, an automated speech-to-text software for an initial transcription. After downloading the transcripts from Trint, I cross-checked the transcripts by listening to the Zoom audio recordings, pausing to edit all inaccuracies. Once a transcript was edited and verified, I labeled it with the date and a pseudonym for

the subject. References to names were also replaced with a pseudonym or descriptor (e.g., *Principal*), which I highlighted to note the change.

Teacher-created documents. To further understand how students at Carson High School were exposed to the Hochman Method writing strategies, I analyzed 50 written documents developed by ten teachers, including an ELA co-teaching team of two, a social studies co-teaching team, and six other individual ELA, social studies, science, mathematics, and elective teachers. These documents included activities that were used with students during class lessons. For example, some documents contained class readings followed by a sentence-level writing activity, as illustrated in Figure 8.

Responses were analyzed inductively using content analysis to triangulate the analysis of students' writing samples and the educator interviews.

Figure 8

Example of a Teacher-Created Activity for Content Analysis

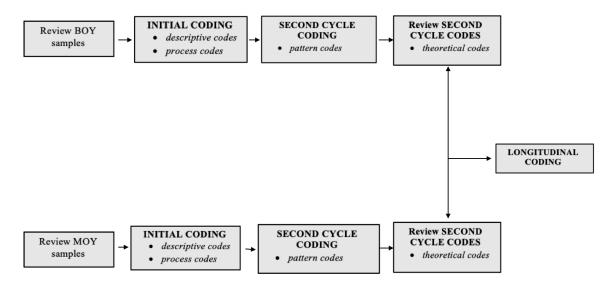
Soil And Calcium – Ho By: Jackie Rhoades	ow Calcium Affects Plants Soil, Fixes & Fertilizers
Yes, and it's also essen and animals, can plants is required in garden so carry nutrients through equals a calcium deficie problems still exist, it's t soil. But first let's ask th in garden soil? How Calcium Affects I There are many essenti of them. It's not only net the plant upright, it prov salts and organic acids. vitamin pill. A calcium d and tissues. Brown spot the leaves. Blossom en	arden soil? Isn't that the stuff that builds strong teeth and bones? tital for the "bones" of your plants — the cell walls. Like people suffer from calcium deficiency? Plant experts say yes, calcium ii. Good soil and calcium are linked. Just as we need fluids to our body, so is water needed to carry calcium. Too little water ency plant. If water is sufficient and time to ask how to raise calcium in e question, WHY is calcium required Plants all minerals in soil, and calcium is one eded to build strong cell walls to keep iddes transport for other minerals. It may also counteract alkali When you add calcium to the soil, it's like giving your garden a efficiency plant is notable for its stunted growth in new leaves to may appear along the edges and grow toward the center of d or to in tomatoes and peppers, black heart in celery and internal et all signals to add calcium to the soil.
	he Summary Sentence. It is not necessary to use all the nd only to the ones that are relevant.
What?	
(did/will do) What?	
Why?	
How?	
Summary Sentence:	

Content analysis sequence for student documents. Student BOY and MOY writing samples were systematically coded and categorized through inductive analysis. As illustrated in Figure 9, multiple coding methods were employed in an effort to enhance the depth and breadth of the content analysis (Saldana, 2009). I followed the following steps for the analysis of the student BOY and MOY documents:

- I downloaded the BOY and MOY document sets (PDF format) from the No More
 Marking platform and reviewed all samples to ensure legibility. (One BOY
 sample and its corresponding MOY sample had to be removed due to illegibility.)
- I uploaded the PDF files to Adobe Acrobat DC. For each student, I assigned and labeled a unique number to their BOY sample, and labeled their corresponding MOY sample with the same number.
- 3. I uploaded the labeled BOY PDF file to the MAXQDA qualitative data analysis software and conducted a first cycle of Initial Coding.
 - a. Because the focus of the current study was on the characteristics of students' writing. I employed descriptive coding to "document and categorize" characteristics that I observed (Saldana, 2009, p. 70), and identified process codes, words or phrases capturing actions.
- 4. I decided to conduct the second cycle of coding by hand as "handling the data gets additional data out of memory and into the record (Graue & Walsh, 1998, p. 145, as cited in Saldana, 2009). Therefore, I printed the BOY document set that was labeled with the first cycle codes from MAXQDA and began a second cycle of coding using pattern coding to develop categories and themes based on the codes that were identified from the first cycle. Incidents that developed into

- codes, categories, and themes were noted in a Microsoft Excel spreadsheet; incidents across samples were compared to see if they applied to the category, expanded the category, or were non-applicable.
- 5. I continued to analyze and compare the documents within the BOY set until they reached the point of data saturation, the point where the "information... becomes redundant" (Bogden & Biklen, 2003, p. 62). As I linked categories and subcategories, *theoretical codes*, which "appear to have the greatest explanatory relevance" (Saldana, 2009, p. 149) for a phenomenon, were developed.
- 6. I repeated Steps 3 through 5 for students' MOY samples.
- 7. After completing the four steps for the student BOY and MOY document analysis, I compared the *pattern* and *theoretical codes* from both document sets to develop *longitudinal codes* noting any increase, decrease, or constancy (Saldana, 2009) in the data.

Figure 9
Student BOY-MOY Coding Sequence



Content analysis sequence for teacher documents. Teacher-created documents were systematically coded and categorized through inductive analysis. As illustrated in Figure 10, I employed multiple coding methods consistent with the sequence that was used in the student document analysis.

Figure 10

Teacher-Created Documents Coding Sequence



I followed the following steps for the analysis of the teacher-created documents:

- I downloaded the teacher-created writing activities from a Google Drive folder that was shared with me by the school, and reviewed all samples to ensure legibility.
- 2. I printed the documents for manual coding.
- 3. I conducted a first cycle of Initial Coding using descriptive and process codes to document and categorize characteristics and capture actions expressed in the documents. I continued to review the initial codes until no new codes emerged.
- 4. I began a second cycle of coding using pattern coding to develop categories and themes based on the codes that were identified from the first cycle. Incidents that developed into codes, categories, and themes were noted in a Microsoft Excel spreadsheet; incidents across samples were compared to see if they applied to the category, expanded the category, or were non-applicable.

 I continued to analyze and compare the documents until they reached the point of data saturation. As I linked categories and subcategories, theoretical codes were developed.

Throughout the entire review and coding processes, I wrote memos reflecting my ideas, observations about the data, and reflections of my subjectivity and biases.

Analysis sequence for educator interviews.

In addition to the document analyses, I interviewed two teachers who taught the ninth grade students during the 2019-2020 school year, as well as the school's instructional coach who observed ninth grade teachers and students during that timeframe. The interviews were recorded, transcribed via artificial intelligence transcription software, cross-checked with the recordings for accuracy and necessary editing, and member checked with participants for accuracy. I coded and categorized the transcripts using the following steps outlined previously to determine if there were trends in educators' experiences and perceptions:

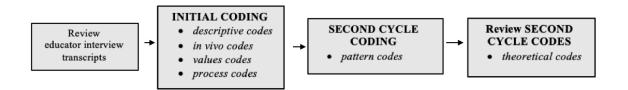
- I printed the cross-checked and participant-verified interview transcriptions for manual coding.
- 2. I conducted a first cycle of Initial Coding using descriptive and process codes to document and categorize characteristics and capture actions expressed in the documents. In addition, I employed in vivo coding "to keep the data rooted in the participant's own language" (Saldana, 2009, p. 6) and values coding "to capture and label subjective perspectives" (Saldana, 2009, p. 7). I continued to review the initial codes until no new codes emerged.

- 3. I began a second cycle of coding using pattern coding to develop categories and themes based on the codes that were identified from the first cycle. Incidents that developed into codes, categories, and themes were noted in a Microsoft Excel spreadsheet; incidents across samples were compared to see if they applied to the category, expanded the category, or were non-applicable.
- 4. I continued to analyze and compare the documents until they reached the point of data saturation. As I linked categories and subcategories, *theoretical codes* were developed.

Throughout the entire review and coding processes, I wrote memos reflecting my ideas, observations about the data, and reflections of my subjectivity and biases.

Figure 11

Educator Interview Transcripts Coding Sequence



CHAPTER 4: RESULTS

Question 1

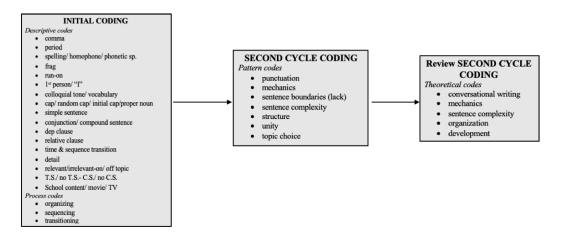
What were the characteristics of the writing produced by ninth grade students from Economically Challenged (EC) households when they entered high school?

To answer the first research question, I analyzed a document set of beginning-of-year (BOY) writing samples from 80 students. Those writing samples were based on a writing prompt that was expository in nature, asking students to select a character from a novel, short story, or play, and write a paragraph about how the character changes in the story.

Before the first cycle of coding, I reviewed the document set and wrote memos to record my initial thoughts on the content. During the review phase, one sample was removed due to illegibility. Next, I conducted a cycle of initial coding, using descriptive coding (Saldana, 2009) to document characteristics of the students' writing and process coding to capturing actions indicated in the writing. This cycle of initial coding was repeated to verify, revise, or refine the codes that were first noted. When no new codes emerged, I conducted a second cycle of coding using pattern coding to develop categories and themes that identified characteristics of students' BOY writing.

Figure 12

BOY Samples Coding Sequence

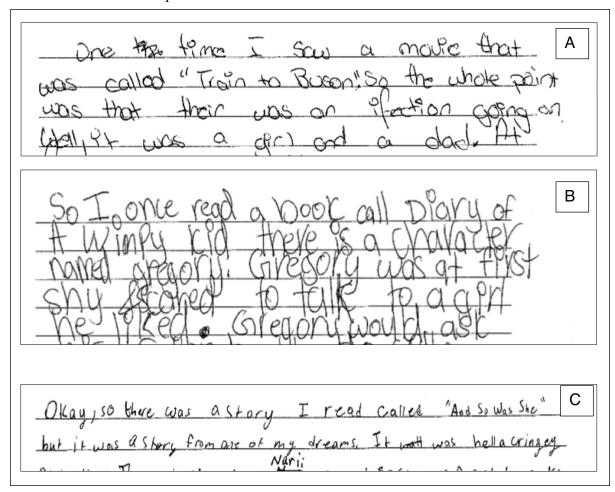


Conversational writing. One theme that I developed from the analysis of the BOY paragraph samples was the prevalence of conversational, oral language structures in students' writing. Most instances were found in the BOY samples ranked Beginning and Developing, but even at the Proficient level, half of the samples contained at least one instance of a code that was later categorized as "conversational." These instances often included the use of first person language and took the form of run-ons, fragments, or grammatically incorrect sentences.

Conversational structures often occurred at the beginning of paragraphs as students were introducing the topic or character. Many students' opening sentences use of first person language, and some took the form of run-on or grammatically incorrect sentence, as illustrated in Example B of Figure 13:

Figure 13

BOY Conversational Openers



Conversational structures were prevalent in samples where students demonstrated a lack of command of the subject matter, as in the following excerpt produced by Student 20:

Figure 14

Student 20 Conversational Structures

This Film I forgot about the name but I do remember How it started. Their was this kid who always made Fun of a basketball player because he was topogo bad he didn't know how to shoot or anything because he's a begginer at basketball. and the other mean kid name

While instances of conversational writing were often found in introductory or topic sentences, oral structures were prevalent within students' paragraphs as well. In some samples, these structures took the form of sentence fragments, as found in this excerpt from one student's paragraph, "He avoided family, killed a lot of people and spent most of him time alone. Basic bad guy right?"

Instances of conversational writing did not always take the form of a grammatically incorrect sentence. In many samples, students relied on the word "so" to introduce the paragraph or transition from one idea to the next. "So" is a common filler word, a verbal pause used frequently in oral communication (Mele, 2017). This filler word appeared throughout students' paragraphs. In one Proficient sample, a student recounted how a character named "Ghost" changed throughout a story, using the common filler word "so" repeatedly as a sentence starter:

"...Ghost decides to race the boy and it ends up in a tie. So the coach of the team wants to recruit Ghost to the team but Ghost wants to play basketball. So the

coach tells Ghost about how if he joins the track team it can help his legs out so he can get better at basketball. So they make a deal..."

Issues with mechanics. Another theme that developed from the BOY student writing sample analysis indicated that students lacked command of mechanics, namely punctuation, capitalization, and spelling.

Missing or incorrect punctuation was the most common issue with mechanics. In the 79 BOY samples analyzed, 72 contained at least one punctuation error. Although they were prevalent, punctuation errors hampered readability more than the hindered understanding. The most common punctuation error was missing commas, typically following a transitional word or phrase at the beginning of a sentence, or preceding a coordinating conjunction separating two independent clauses.

Lack of capitalization at the beginning of sentences, and of proper nouns, was common across samples. This student example is emblematic of the inconsistency with capitalization within the same paragraph:

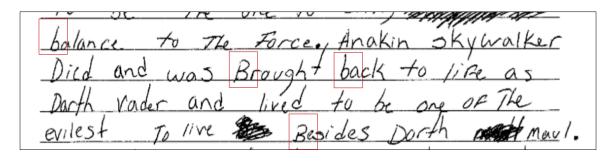
Figure 15

BOY Capitalization Inconsistency

there were once two brothers
Indra and ashura. Indra had inperited
great power From hasoromo (n'is Father While the
other brother dant. Years later on
Indres mind set changed; the way
he thoughth about the world because
of black zetsv. I nora became Evil
and Jealous Because or ashures
great Six Paths Power. India
were decondents of other skinble
that were Passed down to reincarnate
the ocle of hatered

Another common characteristic was the random capitalization of words within sentences. In some cases, students consistently capitalized the same letter within the samples; in others, students alternated writing the same letter in its capital and lower case form, as seen with the letter b in the sample written by Student 62:

Figure 16
Student 62 BOY Sample



Spelling errors were made in most paragraphs. Often, these took the form of homophones, especially the interchange of to-too and their-there-they're. In other

instances, students attempted to spell low-frequency words phonetically. For example, one student attempted to write the word drastically as "Jurrastically." Two other common errors were the misspelling of words containing double consonants (e.g., beginning), and the misspelling of the two-word construction "a lot" as "alot" or "allot."

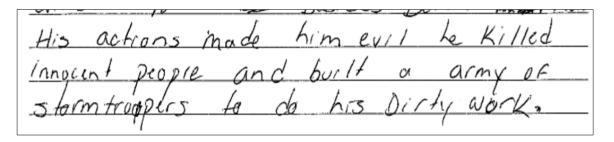
Most samples could be read despite their mechanical issues. However, errors in punctuation, capitalization, and spelling may have reflected poorly on student samples that contained multiple mechanical issues, as these errors occurred most frequently in samples ranked by teachers as Beginning and Developing.

Lack of sentence boundaries. A third theme I identified from the BOY writing sample analysis related to students' issues with sentence boundaries. This theme is interconnected with the previous two themes, Conversational Writing and Issues with Mechanics, but there were distinctions between the three.

I defined sentence boundaries as the notion where a sentence begins and ends; thus, the prevalence of run-ons and sentence fragments was themed as 'lack of sentence boundaries." Writing categorized as conversational often lacked sentence boundaries as run-ons and fragments are common oral language structures. However, run-ons and fragments may or may not be conversational in tone.

For example, a fused sentence, a run-on consisting of two independent clauses with no punctuation or coordinating conjunction (Strunk, 1918), was a common sentence boundary error, as found in the final sentence of Student 62's paragraph:

Figure 17
Student 62 BOY Fused Sentence Example



Comma splices, run-ons consisting of two independent clauses joined with a comma but without a conjunction (Strunk, 1918), appeared in students' BOY writing as well.

Figure 18
Student 22 Comma Splice Example

Similarly, when introducing his paragraph, Student 24 wrote, "the character i'm choosing to write about is from the book Lost Stars, her name is Czina rez." This example exemplifies the interconnectedness of the first three themes: the inclusion of first person language (conversational), missing capitalization (mechanics), and the comma splice (sentence boundaries).

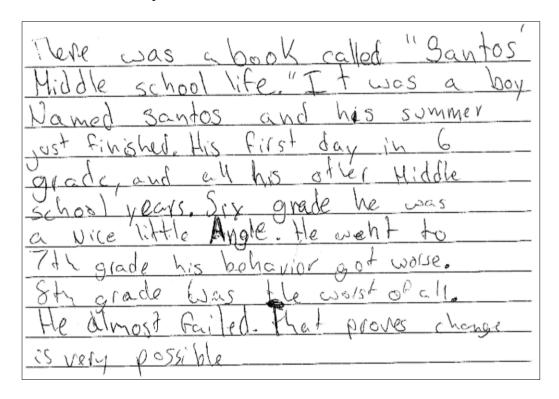
Although *lack of sentence boundaries* was a recurring theme, 11 of 79 students (seven Proficient and four Developing) wrote paragraphs containing varied sentence structure. These samples included at least one simple, compound, and complex sentence.

Paragraph characteristics. A fourth theme identified from the BOY writing analysis was related to the paragraph-level characteristics of students' writing. These

characteristics were developed from codes that were categorized as organization/
structure, unity, coherence, and development. Codes such as "topic sentence,"
"structure," "transitions", "elaboration," and "sequencing" were assigned to paragraphs at
the Proficient level more frequently than those at the Beginning and Developing levels.
Additionally, paragraphs written by female students were assigned paragraph
characteristic codes more frequently than those written by males.

Although most paragraphs had issues with mechanics and sentence boundaries, approximately a quarter of paragraphs had an underlying organizational structure as evidenced by: a topic sentence or general introductory sentence; details that supported the topic and were arranged in a purposeful order; and, a sentence or sentences that concluded the paragraph. As an example, the paragraph written by Student 60 lacked sentence complexity and had mechanical errors, but it had a beginning, a sequential structure, and concluding statement at the end:

Figure 19
Student 60 BOY Sample



Thus, simple or weak sentence structure did not always coincide with, or result in, a lack of paragraph structure. This may be attributed to the nature of the writing prompt; because students were asked to write about a character that changed, most students were able to draw upon narrative or cause-effect text structures. These structures may have been internalized by many of the students since they are frequently encountered in written text, television shows, and movies, and used orally when recounting something that occurred in a time order or sequence.

Another finding related to organization was the presence of unity. Even though many paragraphs contained run-ons, sentence fragments, and were conversational in tone, the writing supported one main idea. Some paragraphs across writing levels contained irrelevant or extraneous information, but most responses remained on-topic.

In samples that were coded as on-topic, students demonstrated varying ability to craft a topic sentence at or near the start of a paragraph. Across writing levels, some students produced topic sentences that established the theme of character change, as shown in Table 4.

 Table 4

 BOY Topic Sentences across Writing Levels

Student	Writing Level	Topic Sentence
14		The character that play's hulk is A normal person until
	Beginning	he turns Angry and he turns big ugly And green.
49		In the book, Wonder, the main character August
	Developing	(Auggie) Pullman changes throughout the story.
74		In the story first day the mother changes the way she
	Developing	acts.
70		Tony Stark aka iron man who stars in the MCU (Marvel
	Proficient	Cinematic Universe) has gone through the most
		character development in my opinion.
38	Proficient	Jeremy Heere, from Be More Chill, definitely Changes
		throughout the story.

In samples containing a topic sentence, some topic sentences introduced the paragraph, but were conversational (as included in the *Conversational writing* section of this chapter). In other samples, the topic sentences were vague and did not name a character or text. For example, Student 03 introduced his paragraph with the following:

A character from a story that I remember changes by being weak at first and letting people push him around to becoming strong and people being afraid of him.

He continued by providing details from the plot, but never addressed who the character was. He then concluded his paragraph with a simple "the end."

However, in most samples, students did not include a topic sentence. It is possible that some students intended for the first sentence they wrote to serve as the topic sentence, and may not have understood the purpose of a topic sentence, A common trend across samples that lacked a topic sentence was the use of a specific detail to begin the paragraph, as evidence in Table.

 Table 5

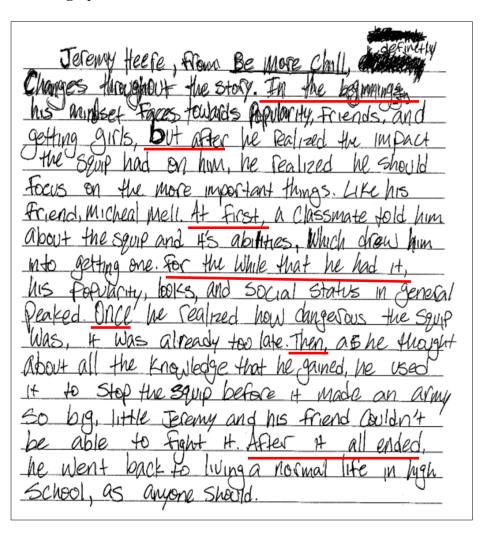
 BOY Introductory Sentences across Writing Levels

Student #	BOY Writing Level	Introductory Sentence
36		When the rich sister could not give the Poor sister
	Beginning	and her kids some Bread Because there was'tn a
		lot for rich sister and poor sister and Her kidS
37	Developing	The grinch hated christmas.
05		In Ghost there was a little boy who had nothing to
	Developing	do one day after school.
02		In "The lightning theif" the main character Perseus
	Proficient	is the son of Posiedon god of the oceans.
11		In the novel "The pearl", a male named kino has a
	Proficient	wife and a kid.

Another subtheme of Paragraph Characteristics was coherence. At the single paragraph level, coherence is a trait that can be achieved from the logical connection between sentences (Strunk & White, 2000). By signaling the relationship between ideas using conjunctions and transitional words and phrases, and sequencing relative to the text structure, a writer can ensure clarity for the reader. Samples ranked at the Proficient level

were more likely to contain connectors and signal words than those ranked Developing or Beginning. One student, #38, wrote a paragraph that contained similar mechanical and grammatical errors as her peers. Unlike most of her peers, she used of transitions and conjunctions to connect and expand her details, which may have resulted in her rank as Proficient.

Figure 20
Student 38 BOY Paragraph



The transition words used most frequently in students' BOY writing were those indicating time order or sequence, such as *in the beginning*, *at first*, *next*, *then*, *after*. The

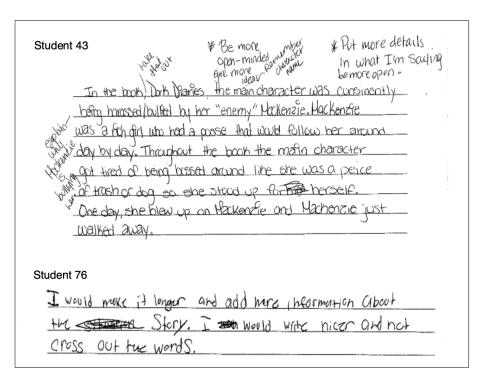
conjunctions *and*, *after*, *when*, and *because* were used by some students to connect clauses. The words *but* and *so* were frequently found across samples, but they rarely functioned as coordinating conjunctions. As mentioned previously, some students used *so* at the beginning of a sentence in the same way it is used as a filler word in oral communication; in those instances, it was not used as a modifier or to indicate a cause-effect relationship between ideas. The use of *but* at the beginning of a sentence occurred in 18 of the 81 BOY samples, and appeared to be used in similar fashion as "so," rather than a stylistic choice.

The fourth category under the theme of Paragraph Characteristics was development. In my analysis of students' BOY writing, I found that the presence of an organizing structure or unity did not frequently coincide with paragraph development.

Often, paragraphs lacked explanation or discussion to develop the topic beyond recounting plot points, and examples or illustrations were not used to support statements about the character's change.

Notable samples. During the administration of the BOY writing assessment, teachers encouraged students to review their paragraphs before submitting. It is not clear by looking at most samples whether any cross-outs, changes, or additions were made during the initial writing or after, but two students, Student 43 and Student 76, reflected on their paragraphs in writing, as seen in Figure 24.

Figure 21
Student Self-Reflections



These self-reflections give unique insight into the students' thought process regarding changes would improve their work. Both students identified a need for more detail or information in reviewing their writing, an observation that I observed as well among most of the other samples. The self-reflections from these two students made me wonder how aware their peers were about their own writing.

Question 2

How did the writing produced by ninth grade students from EC households change after receiving four months of the Hochman Method sentence-level writing strategies?

According to the quantitative analysis conducted in January 2020, there was a mean scale score increase of 11.47 from the BOY to MOY writing assessment. The

magnitude of this change measured by calculating an effect size, which was found to be 0.84. A scale score of 0.8 and higher is generally regarded as a large effect (McLeod, 2019). I developed the second research question to examine the phenomenon indicated by the significant scale score change.

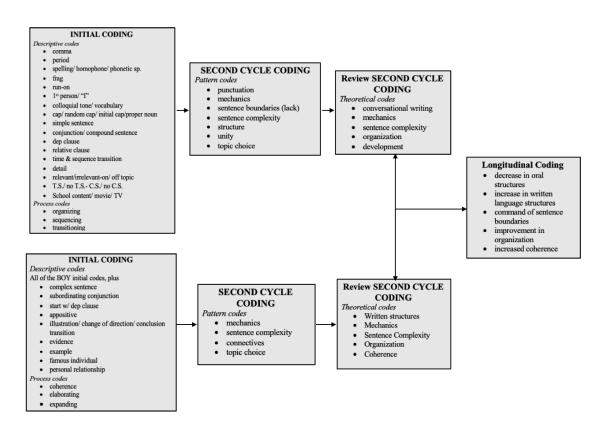
To answer the second research question, I analyzed a document set of middle-of-year (MOY) writing samples from the same 79 students who composed the BOY samples. Similar to the BOY prompt, the MOY writing prompt was expository in nature, asking students to choose a person they learned about, describing that person and their impact.

I repeated the same review and initial and second cycle coding processes for the MOY samples as I did for the BOY samples. Before the first cycle of MOY sample coding, I reviewed the document set and wrote memos to record my thoughts on the content. I used descriptive and process coding during the first cycle, and repeated the cycle to verify, revise, or refine the codes that were first noted. When no new codes emerged, I conducted a second cycle of pattern coding to develop categories and themes that identified characteristics of students' BOY writing. The second cycle of coding was reviewed to see if theoretical codes could be identified.

After the second cycle review, I conducted a third cycle of longitudinal coding to note if there was any increase, decrease, or constancy (Saldana, 2009) between the BOY and MOY codes, categories, and themes. From the third cycle of coding, I identified themes that reflected changes in the students' writing after receiving four months of Hochman Method writing instruction.

Figure 22

BOY-MOY Samples Coding Sequence



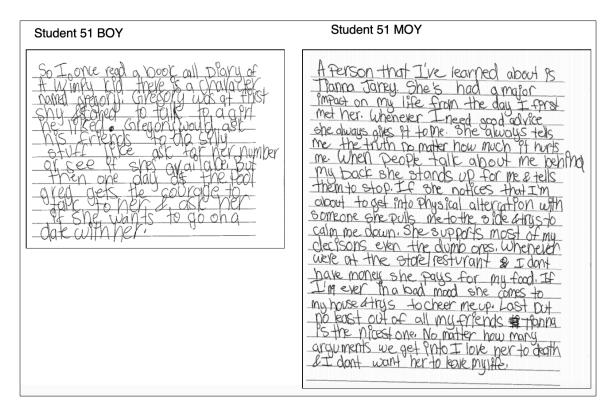
Shift from oral to written language structures. In the BOY writing analysis, conversational writing was identified as a prevalent trend in samples across writing levels. As a theme, conversational writing included the use of oral language structures such as run-ons, fragments, and first person language. As noted in Research Question 1, there was often overlap between three themes: conversational writing, issues with mechanics, and lack of sentence boundaries. While there was constancy in codes related to mechanics between the BOY and MOY writing samples, there was a notable decrease in codes related to conversational writing and sentence boundaries. Concurrently, there was an increase in codes related to written language structures.

One written language structure that notably increased from the BOY to MOY samples was the complex sentence, a sentence which contains an independent and dependent clause. While they can follow different sequences, complex sentences written by students in the MOY samples tended to be structured with a subordinating conjunction, such as *If*, *When*, *Although*, and *Since*, at the start of the sentence to introduce a dependent clause. Sentences that begin with a subordination are found frequently in written text, yet they are used less often in spoken language (Hochman & Wexler, 2017; Scott & Balthazar, 2013). The use of a dependent clause indicates a specific relationship between each part of the sentence. Within a paragraph, these sentence constructs can help achieve coherence.

One student who experienced the shift from oral to written language structures in his writing was Student 51. When he entered ninth grade, Student 51 produced a paragraph that began with a conversational, fused sentence: "So I once read a book call Diary of A Wimpy Kid there is a character named Gregory." The paragraph was unified around the topic of a character who experienced a change, but contained mechanical and grammatical errors. In his MOY paragraph, the student continued to make some grammatical errors, but there is a notable increase in sentence complexity. There are multiple complex sentences, each beginning with a dependent clause headed by a subordinating conjunction. For example, when describing a friend who had an impact on his life, Student 51 wrote: "If I'm ever in a bad mood she comes to my house & trys to cheer me up." Like the other complex sentences in her paragraph, this sentence illustrates that improvement in mechanics does not necessarily occur simultaneously with improvement in sentence structure, but may follow in a progression. The paragraph

written by Student 51 is emblematic of the phenomenon that occurred across the grade level as a whole: the frequency of codes related to mechanics remained steady from the BOY to MOY writing samples, while the number of samples that received codes under the categories of sentence variety and sentence complexity increased from 11 to 27.

Figure 23
Student 51 Writing Comparison



Another written language structure that appeared more frequently in students' MOY writing was the appositive. An appositives is a noun, noun phrase, or noun clause placed next to another noun to rename or describe it more fully (Hochman & Wexler, 2017). Appositives are useful in providing description or more information about someone or something; hence, they are commonly used in expository writing (Scott & Balthazar, 2013). Because they are rarely used in spoken language appositives shifted the tone in some students' writing.

For example, Student 62 used a statement as a topic sentence in his first writing sample. In his MOY paragraph, he incorporated an appositive, which provided information about the subject, Mike Tyson:

BOY: In Star Wars Theres a character named anakin skywalker who changed OVerTime in a very Dark way.

MOY: Mike Tyson, A Former heavyweight champion of The world, was a Force to be reckoned with."

While Student 62 continued to make similar mechanical errors in his MOY assessment, specifically the use of random capitalization, his sentence structure became more syntactically complex. Similarly, the topic sentences written by Student 33 shifted from oral to written language in structure:

BOY: In "Diary of a Wimpy Kid" The main Character Greg had no one because he was very anti social and by no one I mean not many friends.

MOY: One Person I have learned about was Emperor Qin Shihuangdi, First emperor to unify China.

A trend noted in the BOY analysis was how some students vaguely addressed the character and the topic of character change in a topic sentence. In some cases, the character or text was never named. Because the embedding of an appositive requires additional information, Student 71's MOY topic sentence expressed the main idea of his paragraph with more precision than his BOY topic sentence:

BOY: I have been reading a book about a kid who is in school.

MOY: Donald Trump, the current United States president, has made a negative impact on our country.

In total, 11 students included appositives in their MOY paragraphs, as compared to two students at the beginning of the year. Seven of those students embedded an appositive in their topic sentence, three students used an appositive in the body of the paragraph, and one used the appositive in a concluding sentence.

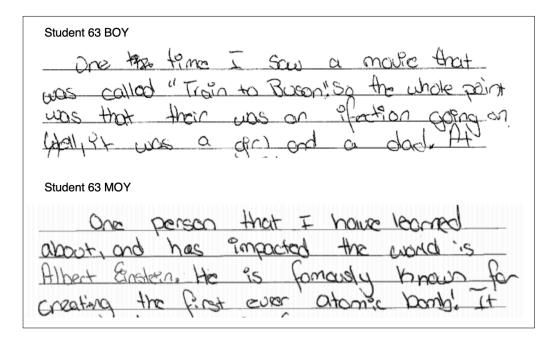
Improvement in paragraph organization and coherence. Another theme I identified from the MOY writing sample analysis was related to paragraph organization and coherence. As noted in the analysis for the first research question, about a quarter of the BOY writing samples contained an underlying organizational structure; paragraphs had a beginning, middle, and end, and followed a logical sequence. During the analysis for Research Question 2, I noticed that more students introduced the topic in a topic sentence at or near the beginning of their paragraph. Likewise, there were more paragraphs that ended with a concluding or summarizing statement in the MOY than BOY samples. Lastly, the body sections of the MOY paragraphs received codes related to structure and coherence more frequently than those written at the beginning of the school year.

Topic sentences. As described in the previous theme, there were changes noted in students' topic sentences from the beginning to the middle of the year. Some students' topic sentences shifted from having a conversational tone or using spoken language structures. This was sometimes achieved by using written language structures, such as an appositive or a complex sentence starting with a subordinate clause. Others did not incorporate these written language structures, such as the MOY topic sentence written by Student 63. Even though he incorporated first person writing at the beginning of both

paragraphs, I found the tone to be less conversational as compared to what he wrote at the beginning of the school year, found in Figure 24.

Figure 24

Student 63 Comparison of Opening Lines



A trend identified in Research Question 1 regarding topic sentences was how some students provided a specific detail as an introductory sentence. When compared to their BOY topic or initial sentence, four of the five students in Figure 28 wrote a sentence akin to a topic sentence in their MOY response. Those students included language directly from the prompt, highlighted in red in Table 6. This may have been a strategy that was taught to the students since this was a trend across other samples as well.

 Table 6

 BOY-MOY Initial Sentence Comparison

Student #	BOY Introductory Sentence	MOY Introductory Sentence
36	When the rich sister could not give	Romeo is a Passionate Person and
	the Poor sister and her kids some	he is in love and will try to win her
	Bread Because there was'tn a lot	by trying hard.
	for rich sister and poor sister and	
	Her kidS	
37	The grinch hated christmas.	A person that I have learned about
		is a boy named Alberto.
05	In Ghost there was a little boy who	For the past two weeks I have
	had nothing to do one day after	been learning about a character
	school.	from Romeo and Juliet which is
		Romeo and I noticed he had a
		positive impact on the people
		around him.
02	In "The lightning theif" the main	A person I have learned about is a
	character Perseus is the son of	"friend".
	Posiedon god of the oceans.	
11	In the novel "The pearl", a male	A person I have learned about was
	named kino has a wife and a kid.	Anne Frank.

Coherence among supporting details. Another category that led to the development of the theme "Improvement in Paragraph Organization and Coherence" regarded coherence within students' MOY paragraphs. As noted in Research Question 1, students whose samples were ranked at the Proficient level incorporated more connective language than their peers. Due to the temporal nature of the BOY prompt about character change, these connections typically took the form of transitional words and phrases that signaled time order or sequence (e.g., first, in the end) as well as conjunctions (because,

but) that linked related ideas together. The MOY prompt, on the other hand, did not have a specific text structure that followed a sequential order. Yet, more students incorporated connectives in their writing in the MOY sample than the BOY. The transitions found in Table 7 were used at the beginning of sentences in students' MOY paragraphs:

Table 7

MOY Transitions by Category

Time Order/ Sequence		Illustration	Change of Direction	Conclusion
First/ At first	When	For example	Unfortunately	Therefore Since
Second	Whenever		Although	In conclusion So
Also	During		Even though	Overall. All in all
In addition.	After		But	As a result
Additionally	Last/ Lastly			Lastly

Most often, the conclusion transitions were used to begin the last sentence of a paragraph. One student ended a paragraph about a famous choreographer by concluding, "Therefore Paris Global has had a big impact on my life." In describing a celebrity chef, another student concluded: "Overall, this specific man is a celebrity, entertainer, and foodie who inspires the world with joy, hunger, and motivation of waking up and cooking."

Once again, students whose paragraphs were ranked at the Proficient or Skilled levels used more connectives than their peers at the Developing level. However, 15 students in those highest levels had samples that were previously ranked as Developing at the start of the school year. As an illustration, the BOY response written by Student 64, in which he discussed how a character from a depiction of the Central Park 5 changed, lacked sentence boundaries and contained mechanical and grammatical errors. In his MOY paragraph, Student 64 discussed a basketball player's impact on sports and society. As can be seen in Figure 25, although some similar mechanical errors were made, there

was a noticeable improvement in sentence boundaries in this sample. Furthermore, the student incorporated cues such as "one way," "another way," and lastly," which signaled each new detail in support of his topic sentence.

Figure 25
Student 64 BOY-MOY Comparison

The 3 This Offer The Other
their is this one story called "The conra PEris"
5" its about 5 Kiss getting wrongfull accused
Of Baliny a kdy Jugger and those 5 Kids
had to seave 10 years in Mison with Until
they well grown not guilty 1 of the Bids
Was 17 and they had to go to adult
Prison and White The was in Juil he was
going cray, his head got mosed UP Mentally
any those to years he was getting beat ap
by Prisopals for having the laber of a
"Parist" he was proven not guilty at the end of
the story and the rist of the central pass
5 had to sense in Juvic.

Lebron James is more than a busket ban Platera the has done many things on and off the court. Not only has he has an impact on basketball he has also had an impact on society. Done way lesson Jumes is more than a basket bull yearer is he built a school in akron ohio for the poor Kids who didn't have much oppositionity, he supplied them with cothes, shoes, backPacks, Bookerballs, capd Bikes Lebran sames made suce to keep the 15its of t the streets. Another was is after exert game he fires a soungfan in the crowd Wrist bund, arm sleere, head bond, and shoes, he alwards makes sull to give back he has been the most loya frient he always makes sore that are his friends are youthy Lastly many prope weer his clothing and Shors due to him being The Ster of Milke, MONT SMY bis the best athlete in the well & becase of how much he gives buck and how wen he takes cure of his Kids and manages origiting. Lebron James has impulsed bushetky and society and he is more than Just a basket bull player.

Changes by gender. In the quantitative analyses that took place during the 2019-2020 school year, the beginning and middle of year writing samples of the 80 ninth grade students from Carson High School were assessed with 1,120 other ninth grade students from participating high schools. Through the process of comparative judgement, the samples were assessed anonymously by educators from the eight participating schools, with each sample receiving a scale score that was converted to one of five writing levels: Beginning, Developing, Proficient, Skilled, and Exemplary.

According to the BOY quantitative analysis, the writing samples of male and female students from Carson High School were ranked as follows:

 Table 8

 BOY Writing Level Percentages by Gender

Gender	Beginning	Developing	Proficient	Skilled	Exemplary
Male	6%	63%	31%	0%	0%
Female	0%	50%	50%	0%	0%

Based on the comparative judgement analysis of the MOY assessments, both male and female students, as a whole, made improvement in their scale scores, resulting in a shift in their writing levels:

Table 9

MOY Writing Level Percentages by Gender

Gender	Beginning	Developing	Proficient	Skilled	Exemplary
Male	0%	33%	46%	20%	0%
Female	0%	15%	73%	12%	0%

One reason why I was interested in studying the research site was to explore what may have changed in the students' writing that led to improvement indicated in Table 9.

When I analyzed the MOY writing samples and clustered the codes and categories by gender, I was able to identify trends.

Males made up approximately two-thirds of the students in this study. Based on the codes and categories that I identified from the BOY analysis, male students received a disproportionate amount of the codes representing the weaker areas of writing, including the use of conversational tone, lack of sentence boundaries, issues with mechanics, and lack of organization and development. Conversely, more than half of the codes and categories representing the stronger areas of writing, including sentence complexity and

paragraph organization and development were identified on the samples written by female students, despite representing only one-third of the total samples.

As described in the previous sections, two dominant themes across the MOY samples regarded the shift from conversational to written language structures, and the improvement in paragraph organization and coherence. Due to the differences in writing level attainment by male and female students, I decided to examined my codes by gender to see if further trends emerged that could possibly explain some of the quantitative results found in the comparative judgement analysis. In educational research, isolating and comparing data by gender is a suggested practice (Saldana, 2009).

Male students. Two trends identified in the analysis of male students' samples were related to sentence boundaries and paragraph organization. In the BOY assessment, issues with grammar, mechanics, and sentence boundaries were more prevalent in the samples written by males than females. Some male students continued to write run-ons and fragments, and errors in mechanics remained steady from the BOY to MOY assessment. In a few samples, the handwriting made it challenging to discern if there was constancy or a change in students' writing. However, one trend I found that may have accounted for the higher scores in their midyear assessment was that many of the male students demonstrated greater awareness of sentence boundaries than they did in the BOY assessment. Some students, such as Student 06, continued to make grammatical errors, but there was a slight improvement in readability.

Figure 26
Student 6 BOY-MOY Comparison

a flat that Change the Shayacter in the stars

Addivible cuzes at firs he use to be loor and

than he sind a mash genithed here set to a

Plece that he like the sore of the vint

woke in the flere ille her sur not soins to set

here to ut senidols con it was be have to

set the wind tore when he does have made

and his loor, then the seni made

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ker cor her till base hut two

kies.

The Person T be talk about That have impact in my life is my Joh Sister even she not impact in my life who becase went of was noch summing she was not sure leaved about from her and she from me. Also I was week Allwass with her went of the vac a high and told me what to to the voot of so I don't get in trobing in conclusion sie been they for me and told me becase she was her seen they for me and told me they want to to the

For other students, the change in sentence boundaries was more pronounced, as can be seen when comparing the first lines of the two samples composed by Student 14:

BOY: The character that play's hulk is A normal person until he turns Angry and he turns big ugly And green. And mad.

MOY: The person I learned about is Adam Sandler, comidian/Actor. Adam Sandler is a comidian and An actor who stared in many movies and is popular for being funny during the movie and making the audience laugh.

Another trend identified from the analysis of male students' samples was in the area of organization. When reviewing and coding the BOY samples, I was not able to discern an organizational structure in most paragraphs written by male students. Many lacked a topic or introductory sentence. As a result, the responses read more like a list than a cohesive whole. I characterized some of the samples as having unity when all sentences were about the same topic. However, more male samples contained hallmarks of an organized and coherent paragraph in the MOY than BOY assessment. Although they ranged in complexity, topic sentences that clearly addressed the prompt were incorporated. In addition, most male students ended their paragraphs with a concluding or summarizing statement. As found with the topic sentences, some concluding sentences were simple restatements of the prompt.

As I found with some of the "organized" paragraphs in the BOY, there was a need for more development among some of the males' MOY paragraphs. In some cases, all details supported the main idea and were sequenced logically, but there was a lack of examples, illustrations, or additional information that would further develop the topic. As I reflected on the phenomenon, I noticed a symmetry between the progress at the sentence and paragraph level. Although there were exceptions, males as a group lacked both sentence and paragraph boundaries at the beginning of the school year. The two

most prevalent trends I identified when comparing the MOY to the BOY samples was an improvement in sentence boundaries and paragraph organization, in which the latter was attributed, in part, to the prevalence of topic and concluding sentences in male students' paragraphs. Therefore, at the sentence and paragraph level, more male students established a beginning, middle, and end. Likewise, at both levels, there was room for further development.

Female students. As identified previously, BOY samples written by female students were ranked higher than those written by their male peers. The 26 female samples were evenly divided as Developing or Proficient. Even though no female samples were ranked at the Beginning level, they were not without their issues with grammar and mechanics. Additionally, issues with conversational writing were common, albeit at a slightly lower rate than the male samples.

The two trends that distinguished the female BOY samples, as a group, from the males were in the areas of sentence boundaries and organization, the same two areas of marked improvement for male students in the midyear assessment. Female students demonstrated greater command of sentence boundaries at the beginning of the year, and composed paragraphs with an underlying structure. In comparing the codes female students received in the analysis of their BOY and MOY assessments, the frequency of codes related to conversational writing, mechanics, and organization remained nearly the same. There was one large change: codes related to sentence complexity doubled. When I noticed this trend, I revisited the female students' paragraphs to examine the phenomenon further.

In the BOY analysis, I found that most female students wrote at least one compound sentences, with the most frequently used connector being the coordinating conjunction "but." Female students continued to write compound sentences in their midyear assessment, but upon further analysis, one sentence construct in particular appeared in nearly half of the female students' MOY samples: the complex sentence headed by the dependent clause. In the BOY samples written by females, six responses contained a complex sentence. In two samples, there was an attempt to use a subordinating conjunction in the middle of a sentence, but the sentence had grammatical errors. For example, Student 27 wrote "So he didn't even though it was in fact his kid and the mother died nothing but a few days ago." As mentioned previously, complex sentences that begin with a subordination are found more frequently in written text, especially expository or informational text, than in spoken language (Scott & Balthazar, 2013). More female students' paragraphs contained this construct in the MOY assessment, and with a greater degree of accuracy. As seen in Table 10, one noticeable omission in most samples was the comma following the dependent clause, which is consistent with the finding on the issue of punctuation.

 Table 10

 Examples of Female Students' MOY Complex Sentences

Student #	Sentence
11	Even though she was so scared she tried to make the best of it.
25	Though she isn't a political figure who has made an impact in society she
	made an impact on other people.
26	Although I have not known him for A long period of time, he has Came to
	be one of the most important people in my life.
37	When we started hanging out more, I got to know so much about him.
38	Before he was able to come in, he had to stay in a camp in Yugoslavia.
52	Although, Barack Obama was the President of the United States of
	America, Machel Obama has also had an impact.
53	Since my mom couldn't understand as much english as she does now,
	she would give us advice like "read it over and over, at least three times".
55	If you need any advice or have any problems, you can go to him for any
	of it.
56	If it weren't for King's protests, marchs and boyscotting in todays world
	there wouldn't be equality towards all races.

Question 3

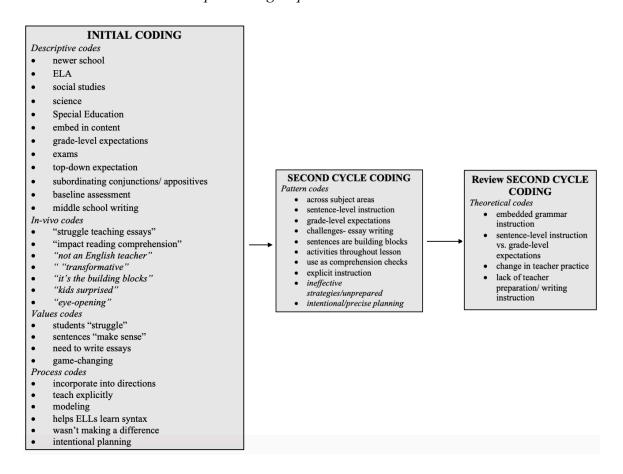
How do content area teachers describe their experience incorporating the Hochman Method of writing instruction into their practice?

To answer the third research question, I analyzed transcripts of interviews with two teachers and one instructional coach from Carson High School. In addition, I conducted a content analysis of 50 writing activities produced by ten teachers. For the transcripts and document set of writing activities, I conducted a first cycle of initial coding, including descriptive, in vivo, values, and process coding. Then, I conducted a second cycle of coding using pattern coding to develop categories and themes from the

first cycle. I analyzed and compared each document set until they reached the point of data saturation.

Figure 27

Educator Interview Transcripts Coding Sequence



Interview participant profiles

"Ms. Goode." Ms. Goode is a sixth year high school instructional coach and social studies teacher and for Carson High School. Before working at Carson, Ms. Goode was a classroom teacher for seven years with the city Department Of Education, two years abroad, and one year with a private school. In her role during the 2019-2020 school year, Ms. Goode supported teachers across subject areas and grade levels around the school's instructional initiatives, including the implementation of the Hochman Method

in all classes. Carson had been established for only two years before Ms. Goode joined the staff, and from the time she began working there, the Hochman Method was an instructional focus. Ms. Goode was designated as the Hochman coordinator, in which she attended additional levels of training in the method. In addition to her experience supporting teachers in the Hochman Method as instructional coach, Ms. Goode had firsthand experience implementing the writing methodology in her own social studies classes. Therefore, I wanted to interview Ms. Goode because she had the unique experience of both teaching and working closely and observing her colleagues teach the Hochman Method. In addition, she had institutional knowledge of the school's implementation of the method over the course of time.

"Ms. Mercer." Ms. Mercer is a 23-year veteran social studies and special education teacher. She began her career teaching in another state before moving to city of the study site, where she has taught world history and other social studies courses for 18 years. For the past seven years, Ms. Mercer has worked at Carson High School. During the 2019-2020 school year, she taught the ninth grade students who produced the writing samples. Ms. Mercer experienced the development of the school's implementation of the Hochman Method over time. Unlike many of her colleagues, she has experienced teaching with and without the Hochman Method given her many years of prior experience.

"Ms. Young." Ms. Young is a special education teacher who has spent all seven years of her teaching career at Carson High School. In her interview, Ms. Young expressed that she loved literature, and that she wanted to become a special education teacher because she wanted to make a difference in how students learn to read. With the

exception of some experience teaching at the college level and in a high school summer program, Ms. Young has only experienced teaching with the Hochman Method as all of her full-time teaching years have been at Carson. During the 2019-2020 school year, Ms. Young taught special education science to the ninth grade. I was interested in learning about Ms. Young's experience incorporating sentence-level writing strategies into her science content for the ninth grade students.

Interview themes. Based on the analysis of the interview data in response to the third research question, I identified themes that reflected how content area teachers experienced incorporating the Hochman Method of writing instruction into their practice.

Changes in teacher practice. One theme I identified from the interview data in response to the third research question was that educators perceived the incorporation of the Hochman Method sentence strategies as having a positive impact on their practice.

Ms. Young shared how the writing strategies "changed the game for me," while Ms.

Goode stated that they were "transformative for my own teaching practice."

In reflecting on incorporating the Hochman Method into her practice, veteran teacher Ms. Mercer shared that "it changes your teaching." As she described her experiences, she repeatedly referenced "explicit teaching," which is the recommended mode of instruction for the Hochman Method strategies (Hochman & Wexler, 2017). When I asked Ms. Mercer how she felt about explicit instruction, she shared that it had always been a part of her practice because of her background as a special education teacher. To Ms. Mercer, "everyone needs to be explicitly taught." Since explicit instruction had already been a part of Mr. Mercer's repertoire, the change in her practice

was in the shift to the sentence level. Prior to incorporating the Hochman Method, Ms.

Mercer routinely assigned essays to her high school students.

Although she has less experience than Ms. Mercer, Ms. Young expressed how the curriculum she designed for ELA summer programs, where she taught English Language Arts to ninth graders before teaching at Carson High School, "did not make much of a difference." As she reflected on her teaching before learning the Hochman Method strategies, she reported "I don't know if I was ever explicit with making sure students understood what they were writing, if they were making more complex sentences. I don't even think I ever looked for that."

Both Ms. Mercer and Ms. Young spoke to the grade-level expectation for ninth grade writing: the essay. Ms. Goode also discussed the essay, and the challenge she faced prior to her role as instructional coach:

It was a constant struggle because how am I supposed to teach them an essay if I

don't know how to, if they can't even write a paragraph. And, I'm a social studies teacher, I'm not an English teacher, so I don't know how I'm supposed to do this. All of the educators interviewed perceived essay writing to be a struggle for their students. Despite all of their best efforts and intentions, they all remarked that the strategies that had used were not effective. Ms. Goode's response also touched on the issue of lack of teacher training in writing instruction, an issue that has been documented

When I asked each of the educators to discuss their perceptions of sentence-level writing instruction in ninth grade, they shared similar responses. Each educator

at the elementary and secondary level (Kiuhara et al., 2009; Brindle et al., 2016).

referenced the concept of scaffolding to build to the essay, starting with sentences. Ms. Goode, who referred to sentences as the "building blocks," explained:

You have to learn to write a sentence in order to do a paragraph, in order to do an essay... There's no way in good conscience that I could have the kids work on a paragraph or an essay without teaching them sentence structure.

However, the educators reported different reactions when they were first introduced to the Hochman Method and the idea of a return to the sentence. While Ms. Goode was introduced to the method in her role as instructional coach, she reflected back on her previous teaching experience and imagined what her reaction would have been, explaining:

If you had told me when I was teaching ninth grade that I should focus on the sentence level, I would have said that doesn't make any sense. I need to get them to write an essay. Why would I focus on a sentence? Just teach me how to do paragraphs. And I would not have gone with it.

Ms. Mercer, on the other hand, explained that she was more open to the idea of explicit, scaffolded writing instruction, which she attributed to her background as a special educator. Similarly, Ms. Young shared her reaction to starting at the sentence level, exclaiming "It just makes sense! You can't have an essay if you don't have individual sentences that have actual complexity to them."

In addition to teaching writing explicitly, a principle of the Hochman Method is that the strategies should be embedded in the curricula, across subject areas. In Ms.

Mercer's social studies classes, the writing instruction, especially at the sentence-level, includes "tons of explicit teaching using a combination of non-content and content." She

explained how she has used the writing strategies as a way to support students' reading of primary documents and historical content, which, admittingly, she referred to as often being "dry." Ms. Mercer explained how she has incorporated the sentence strategies into her practice is to modify class documents to include the "language" of the Hochman Method. For example, she has modified class readings by adding appositives as a way of teaching vocabulary or definitions. She stated that "the sentence strategy is kind of the clue to the word." She also explained that she tries to incorporate the sentence strategies into her directions and own writing so students can see their use in context. Thus, the strategies have not only changed Ms. Mercer's writing instruction, but her practice throughout lessons, especially in support of reading.

One pattern that I found across the interviews related to the impact of the Hochman Method writing scaffold on planning. When asked to discuss how the writing strategies affected her lesson planning, Ms. Young explained:

I think it just makes the lessons more intentional, being able to have activities that align throughout the week to see how students are engaging more with the material and then expressing themselves. I feel like as a special education teacher, this is a way of differentiation, right? If I feel like a student needs some kind of structure, I know I can go to a TWR activity to draw it out.

As the instructional coach observing and planning with teachers across the school, Ms. Goode confirmed the two teachers' self-reflections. She echoed Ms. Young's statement about intentionality, reporting that she has observed changes in "the precision of what teachers are asking their students to do," which has led to more "cohesive" lessons. However, she explained that even though the Hochman Method strategies have

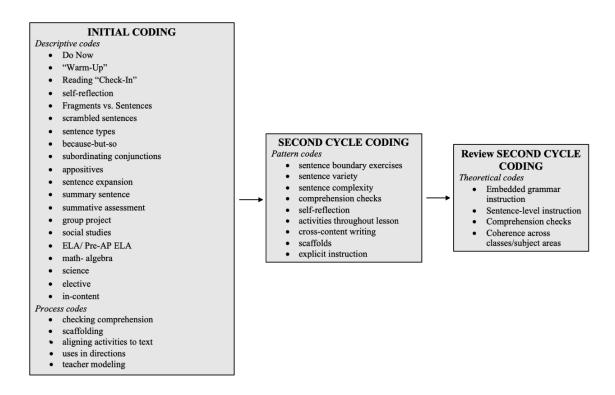
become part of the school's culture, it is not always used in all class consistently. She observed that when teachers did incorporate the strategies:

the rigor of their instruction increases going from these close ended questions that can be answered in one or two words by copying something that they're already looking at to students actually creating well thought out, well, well-organized sentences or paragraphs.

Document analysis. In this study, I conducted a content analysis of teacher-created documents, which consisted of samples of teachers' Hochman Method activities produced during the 2019-2020 school year, to provide context about the study site and strategies used with the student subjects. The document set consisted of 50 classroom writing activities used by ten teachers from Carson High School, including an ELA coteaching team of two, a social studies co-teaching team, and six other individual ELA, social studies, science, mathematics, and elective teachers. The documents were systematically coded and categorized through inductive analysis. Multiple coding methods were employed to enhance the depth and breadth of the content analysis (Saldana, 2009). I analyzed and compared each document set until they reached the point of data saturation.

Figure 28

Teacher-Created Documents Coding Sequence



Teacher-document themes. Based on the analysis of the teacher-created documents in response to the third research question, I identified themes that reflected how content area teachers incorporated the Hochman Method of writing instruction into their practice.

Embedded writing instruction. One theme I identified from my analysis of the teacher-created documents regarded the practice of embedded writing instruction. All of the teacher-created activities were examples of embedded writing instruction, where students learned grammar and writing strategies in the context of their own writing. Moreover, each activity was embedded in the content students were learning. Table indicates the content and Hochman Method strategies found in the document set:

Table 11Teacher-Created Hochman Method Sentence Activities

Subject Area	Content	Hochman Method Activity	Lesson Component(s)
ELA	The Crucible Salem Witch Trials McCarthyism	Sentence expansion Summary sentence Appositives Subordinating conjunctions	 "Warm Up" Mid-lesson comprehension check Research assignment
ELA (Pre- AP) 9 th grade	 "The Red Fox Fur Coat" The Cask of Amontillado Lamb to the Slaughter 	Scrambled sentencesSubordinating conjunctions	Reading comprehension activities
Social Studies 10 th grade	The EnlightenmentLatin American Revolutions	AppositivesSubordinating conjunctions	Unit summative assessment
Social Studies 9 th grade	CultureRiver ValleyCivilizations	 Sentences vs. Fragments Sentence types Sentence expansion Appositives 	Comprehension checks
Social Studies 11 th grade	 The Brief and Wondrous Life of Oscar Wao The Psychopath Test 	 Sentence types Sentence summary Subordinating conjunctions 	Response to reading"Socratic Seminar"
Science 9 th grade	 The water cycle The carbon cycle Living organisms 	 Sentences vs. Fragments Basic conjunctions (because, but) Scrambled Sentences 	"Reading Check-In Break"
Mathematics 9 th grade	Algebra	AppositivesSubordinating conjunctionsSummary sentence	 "Do Now" Reading comprehension activities Summative assessment
Historical Preservation (elective) 9th grade	architecture	Sentence typesBecause-But-So	• "Do Now"

As illustrated in Table 11, teachers incorporated the writing activities into their core curriculum. During the interviews, educators described how the activities served multiple purposes: to help students develop writing skills, to help students process the content, and to serve as comprehension checks for the teachers.

As found in the teacher document set as well as the interviews, teachers at Carson High School used the Hochman Method strategies in their instruction in places where, traditionally, students would be asked to answer questions orally or produce a written response. For example, a common element in teacher lessons is the "do now" or "warm-up." One ninth grade ELA teacher introducing *The Crucible* used the Hochman Method sentence expansion activity as the lesson warm-up:

Figure 29

Sentence Expansion in Ninth Grade English Language Arts

	Name: Date:
Name: Date:	Caption This! Directions: Use sentence expansion questions to create detailed captions for the provided images!
Directions: Expand the following kernel sentence using the question words. They ride on broomsticks. Who: When': Where: Why: Expanded Sentence:	
	Who? When? Where? Caption:

This activity scaffolds the expanding of a kernel, a simple sentence, using question words (Hochman & Wexler, 2017). One purpose of the sentence expansion activity is to teach students how to add more information to their sentences to better inform the reader

(Hochman & Wexler, 2017). Later in the lesson, the teacher asked students to develop an expanded sentence to caption an image depicting the Salem Witch Trials. The teacher did not provide a kernel in the second activity, so students were required to determine the main idea of the image and compose the entire sentence. These two activities are an example of how teachers at Carson High School scaffolded writing instruction, even within individual activities.

Another teacher developed a sentence types activity to be used as a "do now."

One strategy in the Hochman Method sentence scaffold is to have students practice writing in the four sentence types: statement (declarative), question (interrogative), exclamation (exclamatory), and command (imperative) to learn sentence variety (Hochman & Wexler, 2017). In the algebra activity below, the math teacher directed students to generate two of the four sentence types around an image containing algebraic equations. The teacher also provided anticipated student responses. A teacher practice encouraged by Hochman and Wexler (2017) is to anticipate student responses for every writing activity to ensure that what is presented to students is aligned to the lesson's content objectives and will yield the intended outcomes.

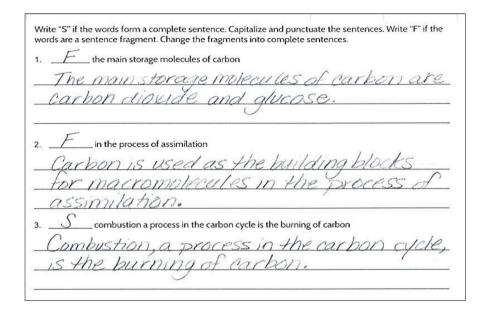
Figure 30
Sentence Types Activity in Algebra with Anticipated Responses

De New
Do Now
-4x - 2y = -12
-4x - 2y = -12 $4x + 8y = -24$
Directions : Write a sentence of each type about the image above:
Statement:
Question:
Anticipated Responses Statement: There are two different variables in these equations / This is a system of equations / The
coefficient for the x variable is the same number.
Question: How can I solve this system of equations? What are the steps needed to solve these equations?

Other teacher-created activities were designed to be used throughout class lessons. Most of these activities were aligned to a reading passage, used in places where comprehension questions may traditionally have been posed. For example, a science teacher incorporated a *fragments vs. sentences* activity after a reading passage about the carbon cycle. This activity, in which students identify and repair fragments and sentences, required students to draw upon what they read and learned in order to convert the fragments into sentences.

Figure 31

Fragments vs. Sentences Activity in Science

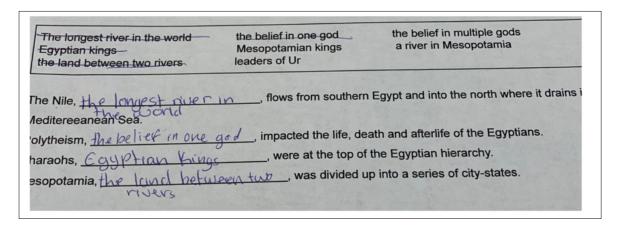


The *fragments vs. sentences* activities was also used by a ninth grade social studies teacher in a lesson about culture. In that activity, students were presented an image of a marketplace in Honduras and were given the fragment "a market in honduras" and a sentence "there are people shopping." This first activity of the Hochman Method sentence scaffold is intended to help students discern sentence boundaries and practice proper capitalization and punctuation, which are provided by the student (Hochman & Wexler, 2017). This activity addresses two prevalent trends identified in the students' BOY responses, lack of sentence boundaries and issues with mechanics.

One trend noted in the analysis of the MOY samples, especially those written by female students, was the increased use of appositives and complex sentences beginning with subordinating conjunctions. Many of the teacher-created activities in the document set contained those two sentence structures. One social studies activity designed to

review key terms and vocabulary pertaining to the early river valley civilizations used an appositive scaffold activity, where students were expected to fill in a missing appositive.

Figure 32
Social Studies Appositives Activity



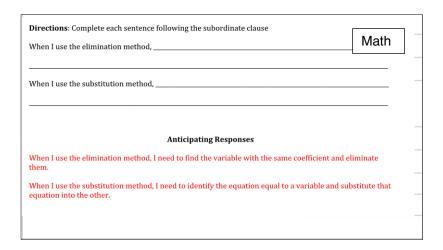
Activities containing subordinating conjunctions were used across the different subject areas. For a college preparation ELA class, a teacher had students reflect on two short stories by completing sentences based on given subordinate clauses. On the bottom of the activity sheet, she asked students to reflect on how using subordinating conjunctions can make their writing better and help them demonstrate knowledge. Another teacher used a subordinate clause activity as way for her students to reflect on two methods they used to solve algebraic equations. Therefore, it appeared that the writing activities served multiple purposes: writing supports, comprehension checks, learning tools, and strategies for self-reflection.

Figure 33a Complex Sentence Activity- ELA

e've r	ions: Each of the sentences below begin with a subordinating conjunction. Keeping in mind the stories read ("The Cask of Amontillado" and "Lamb to the Slaughter") and what you know about each inating conjunction, complete the sentences below.
1.	Even though Fortunato was drunk on his way down to the catacombs,
2.	Since Fortunato was drunk on his way down to the catacombs,
3.	Before Fortunato got so drunk going down to the catacombs,
4-	If Fortunato wasn't so drunk while he was going down to the catacombs,
5.	Even though Mary Maloney killed her husband,
6.	Since Mary Maloney killed her husband,
7.	Before Mary Maloney killed her husband,
8.	If Mary Maloney didn't kill her husband,
Refle	ection: How does using subordinating conjunctions help us improve our writing and show what we know?

Figure 33b

Complex Sentence Activity- Algebra



Question 4

What were the teachers' perceptions of their students' writing before and after learning the Hochman Method strategies?

To answer the fourth research question, I followed the same coding sequence as I did for the third research question to analyze the interview transcripts of the two teachers and one instructional coach from Carson High School

Before learning the Hochman Method. Based on my analysis of the interview transcripts, one theme I identified regarded the educators' negative reflections on their students' writing before learning the Hochman Method strategies. In particular, they perceived essay writing to be a struggle for their students.

Prior to incorporating the Hochman Method, Ms. Mercer routinely assigned social studies essays to her high school students. In reflecting on that experience, Ms. Mercer shared:

I would get to the end of a school year, and papers still didn't make sense, it wasn't even like there was good papers and bad papers, or like an A-level paper and a C-level paper. It was like, I can't even read this paper.

As a teacher of the freshman class, Ms. Mercer reported that her students "all admit that they wrote crappy essays in middle school." She recounted her students affirming how in middle school they had "written nonsense" when their teachers required a lengthy assignment. Along the theme of unpreparedness, Ms. Young and Ms. Goode shared sentiments about how their students have entered high school lacking the writing skills they should have received previously. Ms. Goode lamented, "I wish that our students were getting the sentence level instruction, starting in kindergarten. But they're not."

Ms. Young explained that when her students entered ninth grade, their writing lacked complexity and detail. According to Ms. Goode, her students entered high school "and can't even write a paragraph." These teacher observations support the findings from the analysis of student writing conducted for Research Question 1.

After learning the Hochman Method. During the semi-structured interviews, educators were asked if they noticed a change in students' writing as a result of incorporating the Hochman Method strategies. A theme I identified from the analysis of the interview transcripts indicated that the educators perceived a positive change in their students' writing as a result of learning the writing method.

In response to the interview question, Ms. Young stated "one hundred percent." She continued to explain how the specific Hochman sentence strategies, the names of which are italicized in the excerpt below, changed her students' writing:

When I learned about sentence expansion, giving a kernel and asking kids who, what, why and then having them create the sentences, I saw a huge turnaround. I remember I would give them [students] a baseline to see how they were writing before and then after explicitly teaching sentence expansion, and how much more complexity and detail they went into. And then you add in subordinating conjunctions and because, but, so, your conjunctions. It just changes the game. I was very impressed. Even doing the SPO [Single-Paragraph Outline] made it better because students were able to know that I need to add in my transitional words here, I should add a subordinating conjunction- which made their essays over time much more quality.

The sentence strategies mentioned in Ms. Young's response appeared in students' writing during the midyear assessment, as described in the response to Research Question 2. In particular, subordinating conjunctions used at the beginning of complex sentences were found frequently in the MOY paragraphs written by female students.

Ms. Goode explained that even though the Hochman Method begins at the single-sentence level, students "catch on quickly." She described how when students build from a single sentence, to a paragraph, and then to an essay, "the writing result is just so much better. It's worth taking the time."

Similar to Ms. Goode, Ms. Mercer spoke about her students' essay writing after learning the Hochman Method. In contrast to the lack of readability in her students' writing before learning the strategies, she reported the following:

They still wrote essays at the end of ninth grade. And yes, there was varying levels. But all of them made sense, sentence wise. They weren't always using evidence correctly, but I understood exactly what they meant.

Aside from essay writing, Ms. Mercer shared that the sentence strategies develop "more student voice" because they give students a variety of ways to explain something differently.

Unexpected outcomes. Although there were different ways I could structure the interviews, I decided to conduct semi-structured interviews because they provided a few general questions that helped focus the sessions and gather comparable data while allowing for participants to shape the conversation. The predetermined questions were focused on the impact of the Hochman Method on teacher practice and students' writing,

but during the course of the interviews with Ms. Mercer, she shared two anecdotes that I categorized as "unexpected outcomes."

When asked if she noticed a change in her students' writing as a result of the Hochman Method, Ms. Mercer noted "It drastically changed the writing and the comprehension of our students. And that was not something we thought was going to happen. We didn't realize how much it was going to impact reading comprehension." She later emphasized that the sentence work, in particular, had an impact on reading comprehension. Ms. Mercer described how students began to "recognize" appositives in their reading, and eventually understood how an appositive defines the noun it modifies.

The second "unexpected outcome" for Ms. Mercer was the impact of the writing strategies on her English Language Learners' understanding of their home language. She described a twelfth grade student from Bangladesh who omitted articles in his writing. When she provided feedback to him and one of his peers, he realized in the moment that articles are not used in Bengali as they are in English. This led to a conversation with the peer, who realized that there are articles, but they are tagged on to the word at the end. Ms. Mercer stated, "it was eye-opening for him, an ENL student, to begin to understand how his native language was connected to ours. And that's all because of the writing. That wouldn't have come out otherwise." The conversation continued about learning grammar, and Ms. Mercer concluded with:

I do think it's important for native English speakers to learn grammar... We don't teach English to ourselves the same way we would learn a foreign language... I think it [the Hochman Method] is one of the easiest ways to help our ESL students understand the syntax, how you make a sentence in English.

CHAPTER 5: DISCUSSION

This chapter will present a summary of the themes identified from the qualitative analysis regarding the four research questions. These findings will be discussed in relation to prior research. Limitations of the study will be acknowledged. Lastly, recommendations for future research and practice will be provided.

Research Questions and Summary of Findings

Question 1

What were the characteristics of the writing produced by ninth grade students from Economically Challenged (EC) households when they entered high school?

The use of conversational structures and tone in students' writing. Generally, conversational, oral language structures were prevalent in the writing samples produced by students upon entering high school. The use of first person language, colloquial phrasing, fragments, and run-on or grammatically incorrect sentences characteristics was found in many of the samples analyzed. From a sociocultural perspective, one possible explanation for this trend pertains to students' zone of proximal development. In terms of communication, a student may be able to communicate orally and write most words and phrases, but cannot compose an expository paragraph unaided. Based on cognitive load theory and the capacity theory of writing, producing an expository paragraph may have exceeded some students' working memory capacity, thus, they resorted to the types of language structures that they already knew how to produce.

Most students demonstrated a lack of command of mechanics. Overall, students made errors in punctuation, capitalization, and spelling in the beginning-of-year samples. The most prevalent issue with mechanics related to punctuation, with omitted

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Gallagher (2003), who found that punctuation troubles, especially the use of commas and periods, as a common observable behavior for students with written syntactic weaknesses. This issue was often attributed to, or may have contributed to, the prevalence of run-on and grammatically incorrect sentences across many samples. Another characteristic of students' beginning writing was the lack of capitalization at the start of sentences and of proper nouns, and, conversely, the random capitalization of words that did not warrant it. Lastly, most paragraphs contained spelling errors or used homophones.

As the students' writing levels were determined by teachers (through the process of comparative judgement), mechanical errors may have contributed to students being ranked as Beginning and Developing. This phenomenon extends the research of Allen et al. (2014), who found a strong relationship between mechanics and raters' holistic scoring of written quality.

Lack of sentence boundaries. Generally, students demonstrated a lack of the notion or command of sentence boundaries, where a sentence begins and ends. Both conversational and non-conversational samples often contained fragments and/or run-ons, specifically fused sentences and comma splices.

Some paragraph traits. Although there was variability in this theme, one general trend was the presence of some, but not all, elements and traits of a paragraph. Four paragraph traits, organization/ structure, unity, coherence, and development, were identified across the samples, but in varying degrees.

Variation by writing level and gender. Student writing ranked at the Proficient level, and samples written by female students, more often contained attributes of a

paragraph. In general, those samples contained an underlying structure, containing or attempting a topic sentence, supporting details, and in some, a concluding sentence. In addition, those samples coherently linked ideas using coordinating conjunctions and sequencing transitions.

Underlying structure and unity. The BOY writing prompt asked students to write about a character who changed in a story, and most students, even those with simple or weak sentence structure, sequenced their response in a narrative or cause-effect structure. It is possible that those manners of organization are logical or, from a cognitivist perspective, those structures may have already been internalized by students due to their frequency in written text, in movies and television shows, and in oral stories.

Even though many responses had marked grammatical and mechanical issues, the substance of what was written was unified around the topic of a character's change. However, most responses lacked a topic or introductory sentence. Students who attempted to craft a topic sentence demonstrated varying ability to express the paragraph's main idea.

Lack of development. Overall, students' beginning paragraphs rarely extended beyond statements of plot points. When a plot point was provided, there was, generally, a lack of explanation or discussion that related the detail to the idea of a character's change. Many detail sentences were simple, omitting information that may have developed the ideas further. Often, details were not followed by an examples or illustration.

Question 2

How did the writing produced by ninth grade students from EC households change after receiving four months of the Hochman Method sentence-level writing strategies?

This research question was prompted by significant scale score change in the students' middle-of-year writing samples. I wanted to examine, qualitatively, the characteristics of the MOY paragraphs to determine if, and possibly how, those characteristics changed from the BOY responses. From the analysis of the MOY samples and through theoretical and longitudinal coding, I identified the following changes in students' writing after receiving approximately four months of the Hochman Method sentence-level strategies.

A shift from conversational structures to written language structures.

One theme that I identified in comparing students' BOY and MOY writing was an overall decrease in instances of spoken language structures and conversational tone, and an increase in the use of written language structures. One of those written language structures was the complex sentence, structured with a subordinating conjunction at the start of the sentence to introduce a dependent clause. Another written language structure that appeared in the MOY samples was the appositive, a noun, noun phrase, or noun clause placed next to another noun to rename or describe it more fully (Hochman & Wexler, 2017). Because they are rarely used in spoken language (Scott & Balthazar, 2009), this change was a noticeable phenomenon. The analysis of the educator interviews and teacher-created documents indicated that students were exposed to these structures through explicit, embedded grammar instruction. One explanation for the increased presence of written language structures in the MOY samples is that there was a transference of strategies learned through embedded grammar instruction to students' independent writing, a phenomenon that extends the research of Fearn and Farnan (2007) who found that students receiving embedded grammar instruction demonstrated greater

overall writing quality than their peers receiving discrete grammar instruction. This finding also extends the research by Collins and Norris (2017), who concluded that students learn grammar rules when they are learned through embedded instruction.

From a sociocultural perspective, by practicing strategies within the context of their own writing and through scaffolded instruction, students acquired new structures that they could then apply in an authentic way. Based on cognitive load theory, the individual sentence strategies may have become committed to students' long term memory after receiving frequent, deliberate, and embedded practice.

Organization and coherence. Most BOY responses were on-topic and many followed a sequential structure, but the majority did not write a paragraph that could be considered a cohesive whole. Most lacked a statement of main idea at or near the beginning of the response nor a conclusion or summation. In the midyear samples, more students introduced the topic in a topic sentence and ended with a concluding or summarizing statement. Overall, most students demonstrated an attempt to write a topic sentence at or near the beginning of their paragraph. Topic sentences tended to be less conversational and more precisely established the main idea, though some lifted language directly from the prompt.

Use of connectives. In the midyear writing samples, more students made deliberate connections using transitional words and phrases, and subordinating conjunctions. In the BOY assessment, students who used connectives incorporated time order or sequence transitions (e.g., first, in the end) and the conjunctions and, because, but, and so. But and so in particular were placed at the beginning of sentences, often multiple sentences in a row, and sometimes not indicating a change of direction or effect.

In the MOY assessment, students at the Proficient and skilled levels began to incorporate more types of transitions, including illustration (*for example*), change of direction (*unfortunately*), and conclusion (*therefore*), as well as subordinating conjunctions such as although, even though, and whenever at the beginning of sentences.

Issues with mechanics remained relatively consistent. The frequency of errors in punctuation, capitalization, and spelling remained relatively unchanged from the BOY to MOY writing assessments. While the rate of incidence remained steady, the nature of the errors in punctuation changed. As mentioned under Research Question 1, the most common punctuation error in the beginning writing samples was missing commas. In the BOY assessment, many of the missing commas could be attributed to the prevalence of fused sentences. In the MOY assessment, there were fewer run-on sentences but more compound and complex sentences. Often, students missed the internal punctuation in those sentences. In analyzing the MOY samples by writing level, I found mechanical errors in the samples at the Proficient and Skilled levels, but those samples were less likely to contain grammatical errors that impeded readability. These findings extend the research of Allen et al. (2014), who found that unlike errors in mechanics, grammatical errors in writing did not result in poor holistic ratings.

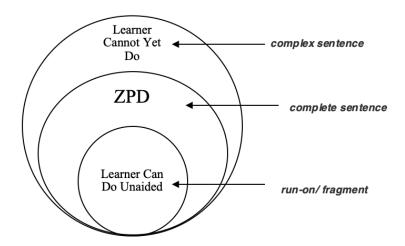
Male students' awareness of sentence and paragraph boundaries. In the BOY assessment, issues with grammar, mechanics, and sentence boundaries were more prevalent in the samples written by male than female students. Although issues with grammar and mechanics continued from the BOY to MOY assessment, there were less fragments and run-ons. For some male students, run-ons continued, but decreased in length.

Another trend identified when comparing the MOY to the BOY samples of male students was an improvement in paragraph organization as more samples included a beginning that stated the paragraph's main idea, and an end that concluded or summarized the details. Thus, more male students established a beginning, middle, and end at both the sentence and paragraph level. This finding extends prior research by Faigly (1979), who found that students who received generative rhetoric instruction demonstrated greater quality in overall writing, a finding he attributed to the sentence-level structures serving as a microcosm of the composition.

The increased presence of sentence boundaries in male students' writing may be explained by the theories framing this study. From a sociocultural standpoint, it is possible that the complex sentence structures taught to male students may have been outside of their zone of proximal development, but writing a complete sentence was attainable, given where they started at the beginning of the school year.

Figure 34

Zone of Proximal Development- Male Students' MOY Sentence Ability



From a cognitivist standpoint, the students' ZPD may be determined by the limited capacity of working memory. Writing a sentence requires many skills, including the understanding of a subject, a predicate, the concept of a complete thought, as well as the standard rules for capitalization, punctuation, and syntax. This is compounded by students' grasp of the content and their vocabulary repertoire. Writing a complex sentence places even more demands on working memory as students have to make choices about the relationship between ideas and determine which idea is subordinate to the other. In the BOY assessment, most male students demonstrated some understanding of expressing a thought in writing, but in some cases the thought was incomplete (fragment), and in others, multiple ideas were combined in a way that was confusing for the reader. Therefore, writing a simple, complete sentence may have been more attainable than writing a complex sentence or a sentence containing an appositive. Those two structures require the use of internal punctuation, specifically the use of commas to separate clauses or offset the appositive. Because commas are not used in oral expression, a student must learn the "rules" for when a comma is used in writing. It is more likely that students will learn those rules best through embedded grammar instruction (Fearn & Farnan, 2007; Graham & Perin, 2007).] In addition, students must be mindful of the reader when writing as commas are of more use to the reader than the writer.

Female students' sentence complexity. In the beginning writing samples, female students demonstrated fewer instances of conversational writing and issues with mechanics than their male peers. In addition, they demonstrated greater command of sentence boundaries at the beginning of the year, and composed paragraphs with an underlying structure. The most prevalent change in the female student samples was in the

area of sentence complexity. In almost half of their MOY samples, female students included at least one complex sentence headed by the dependent clause. In contrast, less than a quarter of female's BOY samples contained a complex sentence. As mentioned previously, one noticeable omission in most samples was the comma following the dependent clause, which corresponds with the constancy in the rate of comma omissions from the BOY to MOY assessments.

Question 3

How do content area teachers describe their experience incorporating the Hochman Method of writing instruction into their practice?

Incorporating embedded, scaffolded writing instruction changed teachers' practice and writing expectations. Overall, the interview data from the instructional coach and two teachers, as well as the content analysis of teacher-created writing activities indicated that incorporating the Hochman Method of embedded, scaffolded writing instruction changed teacher practice and writing expectations for their students.

The three educators that I interviewed indicated that the incorporation of the Hochman Method into their subject area teaching and instructional coaching was a dramatic change, as evidenced by their description of the method as "transformative" and something that "changed the game."

One finding that permeated the interview data was how teachers described a shift in thinking, practice, and expectations from assigning essays to explicit teaching, beginning at the single sentence level. All three educators discussed the grade level expectation that students write compositions when they enter high school and their experience that students, in general, struggled to write essays. Students were described as

not being able to even produce a paragraph, with writing that was unreadable. This finding extends the research by Kiuhara et al. (2009), whose study found that high school perceived their students as lacking the writing skills needed to do the work in their classes. This challenge was augmented by a perceived lack of effective strategies or methods. Evidence to support this finding was found in the educators' anecdotes about not knowing "what to do," and having practices that "did not make a difference." This finding extends previous research from Brimi (2012), Kiuhara et al. (2009), and Street and Stang, 2009, who found a perception among secondary educators that they have received inadequate preparation both pre and in-service to teach writing.

One finding across the interviews regarded the concept of a return to sentence at the high school level. When discussing their perceptions of sentence-level writing instruction before they were introduced to the Hochman Method, one teacher admitted that she didn't think about students' individual sentences, and the instructional coach remarked that she would question why she should focus on sentences when her students had to write essays.

Teachers reactions to the Hochman Method sentence scaffold indicated a mindshift around sentence writing in ninth grade. In contrast to the initial reactions, each educator described the scaffolding from sentences to paragraphs and essays as a concept that "makes sense," and the notion that students' essays are determined by the quality and complexity of the sentences within them.

The educators indicated that a shift in their regular practice was the teaching of sentence writing in their subject area classes (social studies and science) through explicit instruction and modeling, as evidenced by teachers' descriptions of modifications to class

readings, directions, and worksheets to model the use of the writing strategies in content. Similarly, the instructional coach described modeling the strategies in her professional development sessions.

Another shift in teacher practice relates to an underlying principle of the Hochman Method, embedded writing/grammar instruction. Evidence to support this finding was found in the interview accounts of how strategies were used to support content area reading. Moreover, the document analysis of teacher-created writing activities indicated that students were taught the writing strategies in the context of their own writing and embedded in the content they were learning in ELA, social studies, science, mathematics, and elective classes. From a sociocultural perspective, when writing instruction is authentic and attached to the regular classroom context, students are more likely to internalize and transfer the skills to future writing assignments. In the comparison of students' writing samples from the beginning to the middle of the school year, specific sentence-level structures appeared in students' writing with more frequency after exposure to those structures through embedded grammar instruction. Moreover, students were exposed to those structures in their ELA, social studies, math, and science content, yet used them when writing about a topic of personal choice. This finding extends research by Langer and Applebee (1987), who found a mutually beneficial relationship between writing and content; for example, grammar instruction embedded in content was found to improve students' essay writing.

Additionally, the writing activities were used at different points of a lesson where students may have traditionally been asked to respond to questions from a teacher or on a worksheet (e.g., as a *Do Now*, a reading comprehension check, an end-of-lesson

reflection). Based on the educator interviews, the sentence activities helped students access the content and texts they were reading. These findings extend the research by Bangert-Drowns et al. (2004), who found through meta-analysis that extended writing tasks in the content areas produced smaller effects on academic achievement than frequency of incorporating writing tasks; thus, frequent, sentence-level writing tasks may be a greater moderator of student learning in the content areas than repeated essay writing.

Another pattern discerned from the educator interviews and document analysis related to the impact of incorporating the Hochman Method writing scaffold on lesson planning. This finding is evidenced by the educators' description of lessons and teaching as "more intentional" and "having activities that align throughout the week," supported by the instructional coach's reports of teachers being more "precise" in their expectations, resulting in more "cohesive" lessons. The findings of the analysis of teacher-created activities supported the three educators' reports about planning and intentionality as well as their reported return to the sentence and practice of embedded writing instruction.

Question 4

What were the teachers' perceptions of their students' writing before and after learning the Hochman Method strategies?

Educators had negative perceptions of students' writing before learning

Hochman Method. Overall, the interview data indicated that the educators reflected
negatively on their students' writing before learning the Hochman Method strategies.

This finding is evidenced by the educators' description of students' as struggling writers,

producing work that was couldn't be read particularly at the essay level. Students were described as not able to write a single paragraph, and producing work that lacked complexity and detail. These observations were supported by many of the students' beginning paragraphs, as described in the summary of Research Question 1.

Educators noted a positive change in students' writing after learning

Hochman Method. Overall, the interview data indicated that educators perceived a

positive change in students' writing after learning the Hochman Method, as evidenced by
the way they describe students' writing in relation to the strategies. Educators referenced
the sentences within students essays as having more complexity and detail. There were
varied responses to the magnitude of the change, with one teacher noting that students did
not always provide evidence accurately, but their writing could be better understood than
what was written previously. The other teacher reported noticing a "huge turnaround"
and an improvement in essay quality over time, and the instructional coach observed that
the writing was much better as a result of building up from the single sentence. The
educators' interview responses supported the finding in the students' MOY writing
analysis, as the sentence strategies they referenced (subordinating conjunctions, sentence
expansion) appeared in more student responses than in the BOY assessment, especially in
the paragraphs composed by female students.

Improvement in reading comprehension was an unexpected outcome. During one of the semi-structured interviews, one teacher shared that she experienced an unexpected change as a result of the sentence-level strategies: improvement in students' reading comprehension. This finding extends previous research by Graham and Hebert (2010) and Langer and Applebee (1987), which found that writing about reading fosters

processing and analysis of text, and that sentence-level writing strategies, including those used to summarize, have been found to improve reading comprehension.

unexpected outcome that was shared during one semi-structured interview related to the impact of the Hochman Method writing strategies on English Language Learners' (ELL) understanding of their home language. This finding is evidenced by the teacher's description of a student from Bangladesh and his peer who realized a difference in grammatical structure in their home language of Bengali as a result of a writing activity. Additionally, the teacher reported that the writing strategies have helped her ELLs learn English syntax. From a sociocultural perspective, one explanation for these students' discovery, or new understanding of their home language, could be explained by the role that language can play in mediating learning. Through manipulating a new language, these students gained greater awareness of the grammar of their first language.

Additionally, the peer helped the student realize how articles are used in Bengali, and the activity grounding the conversation was developed by the teacher. Thus, the student learned from two "more knowledgeable others" (Vygotsky, 1978).

Theoretical Framework and Present Study's Findings

Writing is a complex skill that involves and imposes a burden on distinct cognitive processes, especially working memory (Flowers & Hayes, 1980; Kellogg, 2001). When writing tasks exceed a student's cognitive capacity, they may struggle (Sweller, 1988). In the present study, it was found that students had numerous issues with producing an expository paragraph, especially in the area of mechanics and sentence

boundaries. Additionally, analysis of teacher interview transcripts found that teachers perceived students as struggling writers upon entering high school.

From a sociocultural perspective, by scaffolding writing instruction, teachers can help relieve some of students' cognitive burden of writing (Smith et al., 2016). The present study examined the changes in students' writing after receiving four months of scaffolded writing instruction. Coding of student writing samples, teacher interview transcripts, and teacher-created materials indicated that most students incorporated strategies they were exposed to through scaffolded, sentence-level instruction. Based on cognitive load theory, the individual sentence strategies learned through scaffolded instruction may have become committed to students' long term memory. In accordance with sociocultural theory, when writing instruction is contextualized, students are more likely to use the strategies. In the present study, teacher interviews and teacher-created documents indicated that the writing instruction students received was embedded in the content of the curriculum and within the context of students' own writing. Analysis of student MOY writing samples indicated that the sentence strategies incorporated in teachers' lessons were used in students' independent writing.

Limitations

Due to the COVID-19 pandemic that began to impact the research site in March 2019, I had to pivot my planned mixed methods study to become a qualitative content analysis of historical documents from the first half of the 2019-2020 school year. Remote instruction posed many challenges in the school, including a significant decrease in student attendance. As a result, it was not feasible to conduct interviews of students to explore their perceptions of their writing and the strategies. I was able to interview two of

the students' teachers and the instructional coach who oversaw the implementation of the method, but the lapse in time from January 2020 to the interview period of January-February 2021 may have resulted in an incomplete or inaccurate reflection of the past events. Additionally, because most of the data analyzed in the current study was historical, I was not able to observe the phenomena in action. Rather, I relied on the educators' accounts and content analysis of teacher activities to provide context for the students' written responses.

Delimitations

The current study is limited to a content analysis of student and teacher documents, as well as educator interviews, from one school. The research questions are confined to the scope of this study.

Recommendations for Future Research

Even though writing is a key component of literacy, research concerning writing instruction has not caught up with that has been conducted for reading. The need is great, especially at the high school level, and critically for the underserved populations of students who would benefit from the findings the most. In the seminal report *Writing Next*, Graham and Perin (2007) noted the dearth of writing research with low-achieving writers, especially those from low-income families in urban settings. The current study sought to address a gap in the extant literature by analyzing the characteristics of the writing of ninth grade students from economically disadvantaged households upon entering an urban high school, and how that writing changed after receiving embedded, scaffolded writing instruction focused at the single-sentence level. Consistent with previous research about embedded writing instruction, content-area writing instruction,

and sentence-level writing instruction, the student writing data, transcripts of educator interviews, and teacher-created documents provided important insights into the characteristics of the expository writing of students from economically disadvantaged households as well as educator perceptions of students' writing and instructional practices. Thus, I will provide some recommendations for future research based on my findings.

A key finding from this study was the prevalence of conversational structures in students' beginning-of-year expository writing prompt. These structures often took the form of run-on sentences and fragments, common oral language structures. As indicated in the educator interviews and review of the teacher-created writing activities, students were presented with writing activities that required them to respond using sentence structures that are found more frequently in written than oral language, such as appositives and complex sentences with left-branching subordinate clauses. While the written language structures were found more frequently in the samples produced after exposure to the Hochman writing strategies, the purpose of the current study was to deeply explore the change in students' writing, not determine causality. Therefore, future research investigating the relationship between the Hochman Method sentence scaffold and adolescent writing is recommended. In addition, future research should include student surveys and interviews to understand their perceptions of the strategies.

In the current study, educator interviews played an important role in providing content for the student writing data and offered insights into high school, content-area teachers' perspectives about sentence-level instruction. The themes of students' struggle with essay writing and teachers' perceived unpreparedness to teach writing before

learning the Hochman Method strategies permeated the interview transcripts. While these findings are supporting by existing data and research (Kiuhara et al., 2009; NAEP, 2011), the other findings that emerged, namely the high school teachers' perceptions of sentence-level writing instruction on students' writing and on lesson planning, warrant future investigation.

In addition, while the sentence scaffold is the bedrock of the Hochman Method, it is but one part of a cohesive writing instructional methodology. The Hochman Method extends to the paragraph, composition, and research paper, and embedded throughout are strategies for planning, revising, note-taking and summarizing. Based on adolescent student writing performance across the country, any one of these elements of the method warrant future research, but a study of how the components work in concert is strongly recommended.

During the teacher interview with Ms. Mercer, she described an "eye-opening" experience for one of her ELLs when he made a connection between his home language of Bengali and English, which she attributed to the Hochman Method writing strategies. At Carson High School, approximately 5% of students during the 2019-2020 school year were classified as ELLs. Therefore, a few of the student samples in the document set were composed by ELLs, but the samples were kept anonymous and not labeled with demographic information beyond gender. Therefore, I was not able to isolate the data to determine trends by ELL classification or ethnicity. With the ever-growing presence of ELLs in American schools, future research investigating the impact of the Hochman Method sentence scaffold on ELLs is recommended.

Recommendations for Practice

As acknowledged in the introduction of the current study, writing is a socially-situated activity that can take on various forms and functions. Expository writing is but one of those forms, yet it receives increased attention as students progress through the grades with the expectation that in college, career, and in life, people must be able to write to explain or to inform in a way that precisely and coherently conveys their message.

In high schools, grade-level expectations for essay writing and the urgency to prepare students for college and career readiness stand in conflict with the fact that many students, especially those from underserved schools and economically disadvantaged households, enter ninth grade lacking the strong foundation that paragraph and essay writing is built upon. From a sociocultural and cognitivist perspective, expecting a student to compose an expository paragraph or essay without command of the sentence may be an insurmountable task. Yet, as expressed in the educator interviews, writing instruction at the single-sentence level may not even be a consideration in many, if not most, high school classrooms. Based on the findings of the current study, I offer several recommendations for practice.

As expressed in the educator interviews and the teacher-created writing activities, as well as the review of the literature, writing serves as a learning tool and enhances reading comprehension (Graham et al, 2020; Graham & Hebert, 2010; Langer & Applebee, 1987). Therefore, I recommend that teachers of all teachers, of all grade levels, embed writing instruction and practice in whatever content they are teaching, for the

aforementioned benefits. From a sociocultural perspective, writing should not be siloed in isolated practice, devoid of the content across subject areas.

Educator interviews and the review of the research indicated that there is a need for increased training on evidence-based writing instruction in teacher preparation programs and in-service professional development. If a component of this training includes discussion of the cognitive demands of writing, teachers may better understand why writing is a challenging skill for most students and the rationale for scaffolded, strategy instruction. Thus, this is a call to colleges and universities to reexamine their teacher education programs to assess the extent to which writing instruction is addressed.

As well, teachers' classroom decisions are shaped by the expectations set forth by school leadership and policymakers at the district and state level. The same knowledge of writing development and evidence-based practices that teachers need to possess must be understood by all levels of school governance.

In the words of Gestalt psychologist Koffka, "the whole is other than the sum of the parts" (Heider, 1977). This principle can easily be applied to writing. Individual letters derive meaning when they form words, and words become a thought when they form a sentence. Sentences, arranged together as a unit, can have great power, but it all begins with one complete thought. Based on the findings of the current study, a return to the sentence, both in the research and in practice, has the potential to empower all students, especially the most disadvantaged.

APPENDIX A IRB Approval

Date: 4-17-2021

IRB #: IRB-FY2021-29

Title: Adolescent Writing Instruction: A Return to the Sentence

Creation Date: 7-3-2020 End Date: 7-16-2021 Status: Approved

Principal Investigator: Toni-Ann Vroom

Review Board: St John's University Institutional Review Board

Sponsor:

Study History

Submission Type Initial	Review Type Expedited	Decision Approved
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Key Study Contacts

Member	Brett Blake	Role	Co-Principal Investigator	Contact blakeb@stjohns.edu
Member	Toni-Ann Vroom	Role	Principal Investigator	Contact toniann.vroom18@stjohns.edu
Member	Toni-Ann Vroom	Role	Primary Contact	Contact toniann.vroom18@stjohns.edu

APPENDIX B School Recruitment Letter



August 2020

Dear Principal:

In addition to my position as co-Executive Director of The Writing Revolution, the non-profit organization with which your school has had a partnership since the 2018-2019 school year, I am also a doctoral candidate in St. John's University Ph.D. in Literacy program. The research I wish to conduct for my doctoral dissertation involves a document analysis of ninth grade students' writing before and after their exposure to Hochman Method sentence-level writing strategies. In addition, I seek to learn about teachers' experiences and perceptions in incorporating sentence-level writing instruction. This study will be conducted under the supervision of Dr. Brett Elizabeth Blake, professor and researcher from the School of Education at St. John's University.

The study I wish to conduct would entail an analysis of your ninth grade students' beginning and middle of year writing samples from the 2019-2020 school year. In addition, I would like to analyze samples of writing activities developed by teachers during the 2019-2020 school year to examine how sentence-level writing instruction was incorporated into their lessons. I also seek to interview approximately 3-5 educators from your school, including your school's instructional coach, to learn about teachers' experiences and perceptions in incorporating sentence-level writing instruction. Each interview will require about an hour of an educator's time. The interviews can be conducted wherever the educators prefer (e.g., via teleconference, in-person) and will be tape-recorded.

At no time will students be asked to participate in this study, and there are no anticipated risks or discomforts to the educators related to this research. Federal regulations require that all subjects be informed of the availability of medical treatment or financial compensation in the event of physical injury resulting from participation in the research. St. John's University cannot provide either medical treatment or financial compensation for any physical injury resulting from your participation in this research project. Inquiries regarding this policy may be made to the principal investigator or, alternatively, the Human Subjects Review Board (718-990-1440).

To protect the anonymity and identity of your school, teachers, and students, the following steps will be taken:

- 1. Names of students and their teachers will be removed from all student writing samples.
- 2. After teacher interviews are recorded, they will be transcribed. Once the interviews are transcribed, the recordings will be destroyed.
- 3. All names or identifiable information mentioned during interviews will be removed from the interview transcriptions.

- 4. I will be the only person with access to the interview transcriptions. Upon completion of the doctoral defense, the interview transcriptions will be destroyed.
- 5. At no time will your name, the name of your school, teachers, or students, or any other identifiable information, be revealed.

Your teachers' participation in this study is voluntary, and they may refuse to participate or withdraw at any time.

While you, your school, and your educators will not receive direct benefits from this study, this research has the potential to increase my understanding on the writing characteristics of adolescent students receiving sentence-level writing instruction. The findings of this study may benefit ninth grade teachers' practice and increase their understanding about adolescent students' writing.

I am hereby seeking your consent to use your school as the subject of this research study. Specifically, I seek to perform a document analysis of your ninth grade students' 2019-2020 school year writing samples, a document analysis of samples of teachers' writing activities from the 2019-2020 school year, and to approach approximately 3-5 educators from your school to interview about their experience.

If there is anything about the study that is unclear or that you do not understand, or if you have questions, you may contact me at <u>toniann.vroom18@stjohns.edu</u> or (917) 685-5911, or the faculty sponsor, Dr. Brett Elizabeth Blake, at <u>blakeb@stjohns.edu</u> or (516) 695-7407.

For questions research participants' rights, you may contact the University's Institutional Review Board, St. John's University, Dr. Raymond DiGiuseppe, Chair <u>digiuser@stjohns.edu</u> 718-990-1955 or Marie Nitopi, IRB Coordinator, <u>nitopim@stjohns.edu</u> 718-990-1440.

You have received a copy of this consent document to keep.

Agreement to Participate

Yes, I consent to allow my school to be the subject in the study describ	ped above.
Principal's Signature	Date

APPENDIX C

Teacher Recruitment Letter



August 2020

Dear Ninth Grade Teacher:

You are being invited to participate in a research study on ninth grade students' writing conducted by Toni-Ann Vroom as part of her doctoral dissertation. In addition to Toni-Ann Vroom's position as co-Executive Director of The Writing Revolution, a non-profit organization with which your school has had a partnership since the 2018-2019 school year, she is also a doctoral candidate in St. John's University Ph.D. in Literacy program. The faculty sponsor for this study is Dr. Brett Elizabeth Blake, professor and researcher from the School of Education at St. John's University.

This study will examine trends and characteristics in students' writing before and after learning Hochman Method sentence-level writing strategies through analysis of students' beginning and mid-year writing samples from the 2019-2020 school year. To provide context and perhaps shed light on the findings of the writing sample analysis, the researcher seeks to analyze samples of teacher-created writing activities incorporating sentence-level writing strategies as well as interview the students' teachers to learn about the teachers' experience and perceptions in incorporating sentence-level writing instruction.

If you would like to participate, this research will require about an hour of your time, during which you will be interviewed about your experience incorporating sentence-level writing instruction into your practice and your perceptions on the impact of that instruction on your students' writing. This interview can be conducted wherever you prefer (e.g., via teleconference, in-person) and will be tape-recorded.

There are no anticipated risks or discomforts related to this research. Federal regulations require that all subjects be informed of the availability of medical treatment or financial compensation in the event of physical injury resulting from participation in the research. St. John's University cannot provide either medical treatment or financial compensation for any physical injury resulting from your participation in this research project. Inquiries regarding this policy may be made to the principal investigator or, alternatively, the Human Subjects Review Board (718-990-1440).

To protect your anonymity and identify, the following steps will be taken:

- 1. After the interview is recorded, it will be transcribed. Once the interview is transcribed, the recording will be destroyed.
- 2. Your name as well as any names or identifiable information mentioned during the interview will be removed from the transcription.

- 3. The researcher will be the only person with access to the interview transcription. Upon completion of the doctoral defense, the interview transcription will be destroyed.
- 4. At no time will your name, the name of your school, or any other identifiable information be revealed.

Participation in this study is voluntary. You may refuse to participate or withdraw at any time. You have the right to skip or not answer any interview questions you prefer not to answer.

While you will not receive direct benefits from this study, this study has the potential to increase the researcher's understanding of the writing characteristics of ninth grade students who receive sentence-level writing instruction. The findings of this study may benefit ninth grade teachers' practice and increase their understanding about adolescent students' writing.

If there is anything about the study or your participation that is unclear or that you do not understand, or if you have questions, you may contact Toni-Ann Vroom at toniann.vroom18@stjohns.edu or (917) 685-5911, or the faculty sponsor, Dr. Brett Elizabeth Blake, at blakeb@stjohns.edu or (516) 695-7407.

For questions about your rights as a research participant, you may contact the University's Institutional Review Board, St. John's University, Dr. Raymond DiGiuseppe, Chair digiuser@stjohns.edu 718-990-1955 or Marie Nitopi, IRB Coordinator, nitopim@stjohns.edu 718-990-1440.

You have received a copy of this consent document to keep.

Agreement to Participate	
Yes, I agree to participate in the study described above.	
Subject's Signature	Date

APPENDIX D

Instructional Coach Recruitment Letter



August 2020

Dear Instructional Coach:

You are being invited to participate in a research study on ninth grade students' writing conducted by Toni-Ann Vroom as part of her doctoral dissertation. In addition to Toni-Ann Vroom's position as co-Executive Director of The Writing Revolution, a non-profit organization with which your school has had a partnership since the 2018-2019 school year, she is also a doctoral candidate in St. John's University Ph.D. in Literacy program. The faculty sponsor for this study is Dr. Brett Elizabeth Blake, professor and researcher from the School of Education at St. John's University.

This study will examine trends and characteristics in students' writing before and after learning Hochman Method sentence-level writing strategies through analysis of ninth grade students' beginning and mid-year writing samples from the 2019-2020 school year. To provide context and perhaps shed light on the findings of the writing sample analysis, the researcher seeks to analyze samples of teacher-created writing activities incorporating sentence-level writing strategies as well as interview teachers to learn about the teachers' experience and perceptions in incorporating sentence-level writing instruction into their practice.

If you would like to participate, this research will require about an hour of your time, during which you will be interviewed about your experience as an instructional coach of teachers who incorporated sentence-level writing instruction into their practice, and your perceptions on the impact of that instruction on students' writing. This interview can be conducted wherever you prefer (e.g., via teleconference, in-person) and will be tape-recorded.

There are no anticipated risks or discomforts related to this research. Federal regulations require that all subjects be informed of the availability of medical treatment or financial compensation in the event of physical injury resulting from participation in the research. St. John's University cannot provide either medical treatment or financial compensation for any physical injury resulting from your participation in this research project. Inquiries regarding this policy may be made to the principal investigator or, alternatively, the Human Subjects Review Board (718-990-1440).

To protect your anonymity and identify, the following steps will be taken:

- 1. After the interview is recorded, it will be transcribed. Once the interview is transcribed, the recording will be destroyed.
- 2. Your name as well as any names or identifiable information mentioned during the interview will be removed from the transcription.

- 3. The researcher will be the only person with access to the interview transcription. Upon completion of the doctoral defense, the interview transcription will be destroyed.
- 4. At no time will your name, the name of your school, or any other identifiable information be revealed.

Participation in this study is voluntary. You may refuse to participate or withdraw at any time. You have the right to skip or not answer any interview questions you prefer not to answer.

While you will not receive direct benefits from this study, this research has the potential to increase the researcher's understanding of the writing characteristics of ninth grade students who receive sentence-level writing instruction. The findings of this study may benefit ninth grade teachers' practice and increase their understanding about adolescent students' writing.

If there is anything about the study or your participation that is unclear or that you do not understand, or if you have questions, you may contact Toni-Ann Vroom at toniann.vroom18@stjohns.edu or (917) 685-5911, or the faculty sponsor, Dr. Brett Elizabeth Blake, at blakeb@stjohns.edu or (516) 695-7407.

For questions about your rights as a research participant, you may contact the University's Institutional Review Board, St. John's University, Dr. Raymond DiGiuseppe, Chair digiuser@stjohns.edu 718-990-1955 or Marie Nitopi, IRB Coordinator, nitopim@stjohns.edu 718-990-1440.

You have received a copy of this consent document to ke

Agreement to Participate

Yes, I agree to participate in the study described above.	
Subject's Signature	Date

APPENDIX E

Instructional Coach Interview Guide



Instructional Coach's Experience Supporting Teachers in Writing Instruction

- 1. Please describe your coaching experience.
- If you incorporated writing or writing instruction into you practice as an
 instructional coach before learning the Hochman Method strategies, please
 describe your experience.
- 3. What are your thoughts on incorporating sentence-level instruction at the high school level? Have those thoughts changed over time?
- 4. Tell me about your experience supporting teachers in incorporating Hochman Method sentence-strategies into their practice.
- 5. Have you noticed a change in teacher practice as a result of incorporating the Hochman Method strategies?
- 6. Have you noticed a change in students' writing as a result of incorporating the Hochman Method strategies?
- 7. Do you have any other comments about adolescent students' writing, writing instruction, or anything else related to the matter of writing that you would like to share?

APPENDIX F

Teacher Interview Guide



Interview Guide for Teachers

- 1. Please describe your teaching experience. (Subject taught, years teaching, etc.)
- 2. If you incorporated writing or writing instruction into you practice before learning the Hochman Method strategies, please describe your experience.
- 3. What are your thoughts on incorporating sentence-level instruction at the high school level? Have those thoughts changed over time?
- 4. Tell me about your experience incorporating Hochman Method sentencestrategies into your practice.
- 5. Have you noticed a change in your practice as a result of incorporating the Hochman Method strategies?
- 6. Have you noticed a change in your students' writing as a result of incorporating the Hochman Method strategies?
- 7. Do you have any other comments about adolescent students' writing, writing instruction, or anything else related to the matter of writing that you would like to share?

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