Effects of Self-Regulated Strategy Development on the persuasive essay writing of seventh grade students with disabilities

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THE EFFECTS OF SELF-REGULATED STRATEGY DEVELOPMENT ON THE PERSUASIVE ESSAY WRITING OF SEVENTH GRADE STUDENTS WITH DISABILITIES

by

Amanda L. Scrivani

A Thesis

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Thesis Chair: Dr. Amy Accardo
Dedication

I would like to dedicate this manuscript to my husband, Andrew Scrivani. Thank you for all your support throughout this process.
Acknowledgments

I would like to express my appreciation to Dr. Amy Accardo for her help and guidance throughout this research.

I would like to thank my family for all of their love and support over the years. You made all of this possible.
Abstract

Amanda L. Scrivani
THE EFFECTS OF SELF-REGULATED STRATEGY DEVELOPMENT ON THE PERSUASIVE ESSAY WRITING OF SEVENTH GRADE STUDENTS WITH DISABILITIES
2016-2017
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Master of Arts in Special Education

The purpose of this study was to analyze the effect of Self-Regulated Strategy Development (SRSD) on the persuasive essay writing of seventh grade students with disabilities. Specifically the study analyzed the effects of SRSD on (a) essay length, (b) number of essay parts, and (c) essay quality. In addition, student satisfaction with SRSD was evaluated for social validity. Eight seventh grade students, seven male and one female, participated in the study. All students were classified with either learning disabilities (LD) or other health impairment (OHI). A single-subject multiple baseline across participants design was used. During the baseline phase, students wrote five persuasive essays. Students were split into three groups, and each group was taught six SRSD lessons. After each group finished the lessons, all students wrote another essay. Results show that after receiving SRSD instruction, students wrote longer, higher quality essays that included more essay parts. Student surveys given after instruction show that the intervention was socially accepted. Further research is needed to examine possible long-term benefits of SRSD for students with disabilities.
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Chapter 1

Introduction

Writing is complex and requires the ability to think about many different processes simultaneously (Harris & Graham, 2013). Students need strong writing skills as they move through their education and beyond. Employers report that proficiency in writing is important at work, and writing skills play a role in choices about hiring and promotions (Baker, Chard, Ketterlin-Geller, Apichatabutra, & Doabler, 2009). However, many students struggle with the process of writing, especially students with learning disabilities (Harris & Graham, 2013).

Many educators favor a writer’s workshop approach to writing. A writer’s workshop approach is one in which students spend time writing during class but may not receive much explicit instruction in writing strategies (Harris & Graham, 2013). Although this approach is effective for many students, it may not be enough support for students with learning disabilities (LD) (Harris & Graham, 2013). Students with LD can benefit from more explicit instruction in writing and writing strategies (Harris & Graham, 2013). Research has shown that traditional instructional methods such as those that focus on grammar and mechanics are ineffective for students with LD (Baker et al., 2009).

Self-Regulated Strategy Development (SRSD) is an evidence-based strategy that was developed based on extensive research on writing and the writing process (Harris & Graham, 2013). SRSD is an instructional model that includes six stages of lessons to explicitly teach writing strategies to students. Lessons have been designed to teach specific writing tasks, such as writing stories or persuasive essays. Studies have shown that students can improve the quality of their writing as well as the number of genre
elements they include in their pieces using SRSD (Mason, Harris, & Graham, 2011), and SRSD has been effectively utilized in teaching students with attention-deficit/hyperactivity disorder (ADHD) and LD (Gillespie & Graham, 2014; Mason et al., 2011).

The majority of students in the United States experience some difficulty with writing (Harris, Graham, & Mason, 2003). Graham, Capizzi, Harris, Hebert, and Morphy (2014) conducted a recent national survey of middle school writing instruction, and found that most students spend little time actually writing during the school day, and most teachers spend little time explicitly teaching students how to write. SRSD is an instructional model that can be utilized by teachers to help their struggling writers. SRSD has been used in whole classes, small groups, and with individuals with positive results (Harris & Graham, 2013). SRSD is an instructional model that may be an effective addition to almost any teacher’s classroom, and it may be especially relevant to Language Arts teachers of students with LD or ADHD.

**Statement of Problem**

Writing is complex but extremely important for all students to learn. Skilled writing requires self-regulation, goal setting, problem solving, use of writing strategies, understanding of the writing process, and knowledge of the various writing genres (Harris, Graham, Friedlander, & Laud, 2013). Motivation also plays an important role as students improve their writing skills (Harris et al., 2013). Unfortunately, less than a third of U. S. students earned a proficient score for writing on the National Assessment of Educational Progress in 2012 (Harris et al., 2013).
Skilled writers use strategies throughout the writing process (Santangelo, Harris, & Graham, 2007). They create goals, self-regulate, and utilize strategies for planning, drafting, and revising (Harris & Graham, 2013). Students need to plan what they are going to say, transform that plan into actual writing, and then evaluate what they have written (Harris & Graham, 2013). In order to do this, writers use strategies, purposeful actions that are consciously performed to achieve a goal (Santangelo et al., 2007). Writing strategies help students organize the various tasks that are required throughout the writing process, such as creating a plan for how to complete an assignment. Santangelo et al. also found that the use of writing strategies enhances knowledge of writing genres and the writing process for students with LD (2007).

Writing is especially difficult for students who have LD or ADHD. In 2007, 94% of students with disabilities received either a basic or below basic writing score on the National Assessment of Educational Progress (Baker et al., 2009). Students with LD often have trouble with executive function and self-regulation, both of which are needed throughout the writing process (Harris & Graham, 2013). These students often have low motivation, show signs of learned helplessness, have trouble managing and processing tasks, tend to be impulsive, and have problems with memory (Harris & Graham, 2013). Students with LD often focus on getting down as many facts as possible, which is called knowledge-telling. They also often do not plan their writing in advance, elaborate on their thoughts, or make revisions. Research shows that these students are also often overly confident in their writing ability and are inaccurate when assessing their own writing (Santangelo et al., 2007). Students who struggle with writing need to be taught strategies for writing as well as for self-regulation (Harris & Graham, 2013).
SRSD is an instructional model that has been successful with different populations of students. It is an evidence-based practice founded in research on writing, writing instruction, students with LD, and effective teaching (Harris et al., 2003). In a conducted meta-analysis, Gillespie and Graham (2014) report that strategy instruction using SRSD has been successful in improving the quality of writing of students with LD. SRSD teaches students explicit strategies using mnemonics and allows for individualized instruction as needed (Harris & Graham, 2013). Baker et al. (2009) conducted an analysis of studies of sufficient quality and results in order to evaluate whether SRSD is an evidence-based practice. Single subject research and group research studies were included in this analysis. They determined that SRSD meets the requirements for evidence-based practice for students with or at risk of LD. Studies have shown that SRSD can be effective and that teachers have been able to use SRSD in their classrooms to help students improve their writing quality, planning, mechanics, and attitude toward writing (Harris et al., 2003).

Significance of the Study

SRSD is an instructional model that has the potential to be used in many different classroom settings. However, in their evaluation of the quality of the current research and evidence base, Baker et al. (2009) recommend further researchers explore SRSD, especially with researchers who are not directly involved with the original SRSD creators. Many of the current studies have at least one of the original creators of SRSD as an author. The current study is significant as it meets the need for research conducted beyond the SRSD creators. As more research is conducted, the effectiveness of SRSD with students with disabilities can be further explored. SRSD may be especially helpful
for special education teachers. SRSD is flexible because it can be implemented alongside other programs that teachers are required to utilize, such as writer’s workshop. Research shows that if schools use it, students with LD can improve their writing (Baker et al., 2009). Furthermore, this study will go beyond investigating the effects of SRSD on students with LD and will also include students with ADHD.

**Purpose of Study**

This study will evaluate the effectiveness of SRSD on the persuasive writing skills of 7th grade students in a pull-out special education Language Arts class. Specifically, it will investigate the effect of SRSD on the number of essay parts that students include, the quality of their essays, and the length of their essays.

**Research Questions**

1) Will SRSD increase the length and number of essay parts that students include in their persuasive essays in a special education Language Arts classroom?

2) Will SRSD increase the quality of the persuasive essay content of students in a special education Language Arts classroom, as measured by a holistic rubric?

3) Are students satisfied with the use of SRSD?
Chapter 2

Literature Review

Self-Regulated Strategy Development

SRSD is an instructional model that uses six stages to teach students how to complete a writing task. Throughout the stages, students are taught how to monitor their own behavior and writing. SRSD includes instruction on brainstorming, drafting, creating goals, and revising (Chalk, Hagan-Burke, & Burke, 2005). SRSD does not focus on only the writing task; by working through the six stages, teachers can address students’ attitude, motivation, beliefs about writing, and self-efficacy (Harris, Graham, Mason, & Friedlander, 2008). SRSD was created in 1982 by Harris, Graham, and various research colleagues including Mason and Friedlander. Although it was originally designed for use with students with disabilities, SRSD has also been used to teach students without disabilities (Harris et al., 2008).

A review of the literature reveals that SRSD has been reported to be effective for multiple populations including students with ADHD and LD (Baker, Chard, Ketterlin-Geller, Apichatabutra, & Doabler, 2009; Reid, Hagaman, & Graham, 2014). Studies have also shown that SRSD can be more effective for students than typical writing instruction (De La Paz & Graham, 2002; Graham, Harris, & Mason, 2004).

Writing Instruction in the United States

Graham, Capizzi, Harris, Hebert, and Morphy conducted a national survey in 2013 to investigate how writing is taught in American middle schools. Teachers reported frequent use of certain instructional practices, including establishing goals for writing and giving feedback on student writing. However, many other practices including having
students use written models to guide their own writing, teaching basic writing skills, using assessment tools such as rubrics, and teaching planning, revising, or drafting strategies were found to be used infrequently (Graham et al., 2013). The types of writing that teachers reported assigning most often included short answer tasks, note-taking, filling out worksheets, and writing answers in response to reading text (Graham et al., 2013). For struggling writers, teachers reported using only one adaptation frequently, that of extra time (Graham et al., 2013).

Moreover, as a result of the national survey, Graham et al. (2013) found that teachers are requiring a limited amount of student time be spent on writing, and that teachers rarely use evidenced-based practices. Harris and Graham believe that explicit instruction in writing can be integrated into the classroom to benefit students, especially those with LD (2013).

**Students with LD.** Students with LD have more difficulty than their peers when it comes to writing (Harris & Graham, 2013). In addition to struggling with the process of writing, students with LD often face issues with motivation, learned helplessness, past failures, and low self-confidence (Harris & Graham, 2013). Research, however, has shown that writing instruction can be effective with students with LD (Harris & Graham, 2013).

Gillespie and Graham (2014) conducted a meta-analysis of writing interventions and report that multiple interventions are effective with students with LD, including: strategy instruction, dictation using a tape recorder or scribe, setting writing goals, and process writing. Strategy instruction including SRSD was shown to significantly improve student writing (Gillespie & Graham, 2014). Moreover, a prior meta-analysis of the
research also found that strategy instruction, including SRSD, strongly affected the quality of student writing (Graham & Perin, 2007). Graham and Perin (2007) recommend teaching explicit strategies for planning, revising, and drafting. SRSD emerges as a recommended instructional practice through both meta-analyses for students with and without disabilities.

**SRSD in the General Education Classroom**

Although SRSD was initially developed for students who struggle with writing, including students with LD, it has been shown to be effective with students without disabilities (De La Paz & Graham, 2002; Harris et al., 2012). De La Paz and Graham (2002) sought to evaluate the effectiveness of SRSD on the essay writing of seventh and eighth grade students in general education language arts classes. The study included 30 students in an experimental group and 28 in a control group. The teachers used SRSD to teach the experimental group a strategy called PLAN and WRITE, to instruct students in planning and drafting essays. After the instruction was complete, students in the experimental group planned more and wrote longer, higher-quality essays that included more mature vocabulary than students in the control group (De La Paz & Graham, 2002). Study results were maintained in a follow-up writing prompt.

Harris and her colleagues found similar results in a study conducted to examine the effects of SRSD on the essay writing of second and third grade students (Harris et al., 2012). The study compared SRSD to traditional instruction. Students were placed into two groups. One group of students learned how to write stories using a strategy called WWW, What=2, How=2 according to the SRSD model. For essay writing, they received regular instruction according to the school’s curriculum, which included process writing.
and basic skills instruction. The second group of students received story-writing instruction according to the school’s traditional curriculum, and a mnemonic called POW+TREE using SRSD for essay writing. Harris and her colleagues looked at features of the students’ writing and found that students wrote better essays when they were taught using SRSD. Similarly, De La Paz and Graham found that students increased the number of words they wrote when they receiving SRSD instruction (2002). Although these studies both focused on students without disabilities, the majority of studies investigating SRSD have been conducted with students with disabilities.

**Students with ADHD.** Students with ADHD have been a focus of research studies in SRSD because they often experience writing difficulty and have trouble staying focused on a writing task (Reid et al., 2014). Reid, Hagaman, and Graham conducted a literature review (2014) to examine the single subject design research that used SRSD for students with ADHD. They found 12 studies that included 27 students in grades 2-12 (Reid et al., 2014). The most common dependent variables were number of words, quality of writing, and number of genre elements. Based on the 12 studies, the number of words in the written pieces more than doubled after SRSD instruction (Reid et al., 2014). Likewise, the quality of student writing, based on holistic ratings scales, more than doubled (Reid et al., 2014). Finally, the number of genre elements that students included in their writing more than tripled after SRSD instruction (Reid et al., 2014).

Although SRSD was shown to be effective with the students in these studies, Reid, Hagaman, and Graham (2014) identify some limitations. Most of the studies focused on the essay writing of middle or high school students. Elementary school students and story writing were not represented in the research. Ten of the twelve studies
used researchers to teach students either individually or in small groups. The authors recommend further research using the students’ teachers rather than outsiders (Reid et al., 2014). The present study uses the participants’ language arts teacher to provide instruction, which is in line with this recommendation.

One study, which included 3 middle school participants, focused on essay planning, length of writing, and quality (De La Paz, 2001b). Two of the participants were in seventh grade and the third was in eighth grade. One of the seventh graders and the eighth grader were diagnosed with ADHD, while the other seventh grader had a classification of LD. All students scored below average on the written language portion of the Weschler Individual Achievement Test (De La Paz, 2001b). A multiple-probe across participants design was used to assess the impact of SRSD instruction. The students were taught the PLAN and WRITE strategy for planning expository essays using individualized instruction (De La Paz, 2001b).

At baseline, only one student did any planning; she planned for only one out of the six baseline essays (De La Paz, 2001b). Essays were also short and of low quality. After learning the PLAN and WRITE strategy, all three students improved in every measured area. The students who improved the most were the ones who had started out with stronger writing skills (De La Paz, 2001b). Study limitations included a tendency for the students to rely on a simple formula, which resulted in introductions and conclusions that were repetitive. Additionally, students’ mechanics and grammar did not improve. Finally, students did not create goals for their writing (De La Paz, 2001b). This study corroborates the findings of Reid, Hagaman, and Graham (2014) and suggests that SRSD is effective for students with ADHD.
**Students with LD.** Baker et al. (2009) looked at high-quality research studies using SRSD for students with LD. They note that there are aspects of SRSD that are particularly well suited to these students’ needs (Baker et al., 2009). Based on their quality requirements, they identified 5 experimental or quasi-experimental studies and 16 single-subject design studies, 9 of which met the guidelines to be considered a high quality study (Baker et al., 2009). SRSD was identified as an evidence-based practice for students with LD (Baker et al., 2009). According to the researchers, the studies provide strong evidence that SRSD can be an effective instructional method for students with or at risk of LD. Baker et al. note that many of the studies have been conducted by researchers who are associated with the original authors of SRSD and recommend that additional researchers investigate the efficacy of SRSD (2009). The present study will extend this research.

Monroe and Troia (2006) conducted a controlled experimental study using SRSD for middle school students with LD. There were six students with LD: three in an instructional treatment group and three in a control group. The students in the instructional treatment group were taught over 14 sessions (Monroe & Troia, 2006). They were taught the DARE (Develop a position statement, Add supporting arguments, Report and refute counterarguments, and End with a strong conclusion) strategy for opinion essays (Monroe & Troia, 2006). They were also taught a strategy for story writing called SPACE: Setting elements, Problems, Actions, Consequences, Emotions. Finally, they were taught the CDO strategy (Compare, Diagnose, and Operate) for revising (Monroe & Troia, 2006). Students wrote essays throughout the baseline and intervention periods,
evaluating their own and their peers’ writing. Essays were scored using a 6-point holistic 
rubric (Monroe & Troia, 2006).

SRSD had a positive effect on student writing. Every area showed improvement, 
with organization being the most significant (Monroe & Troia, 2006). The students who 
received the SRSD instruction scored better than the students who did not. They also 
increased the number of genre elements in their compositions. However, two students 
only improved by an average of one element. These results are similar to other studies 
where the degree of the improvement has varied. Unlike the De La Paz study (2001b), the 
students who improved the most in this study were the ones who started with weaker 
writing. Limitations in this study included a small number of students, the use of 
nonrandom groupings due to school realities, and the lack of a maintenance probe 
(Monroe & Troia, 2006). Nevertheless, this study provides evidence that SRSD is 
effective for students with LD in middle school.

Sexton, Harris, and Graham (1998) conducted a study with fifth and sixth grade 
students with LD to determine the effectiveness of SRSD for planning and writing essays. 
The six participants were all identified as having LD, and the study was a multiple-
baseline across subjects design. The authors evaluated the impact of SRSD on the number 
of essay elements students included, the amount of time spent planning, and the length 
and quality of essays (Sexton et al., 1998). Students were taught a mnemonic called 
TREE to help them plan essays, which was provided as a chart to remind students to note 
Topic sentence, note Reasons, Examine reasons, and note Ending (Sexton et al., 1998). 
For this study, students were taught in pairs, a format that differs from other studies 
which used individualized instruction. Student pairs moved through the six stages of
SRSD. Instruction started with the first pair, and then the second pair began instruction once the first pair reached criterion level, which was an increase of one and a half times the average number of elements that they had included in their baseline essays. After instruction ended, students completed three or four more essays and then maintenance probes at 3, 6, or 8 weeks (Sexton et al., 1998).

All students showed improvement from their baseline essays, with quality and length of writing improving significantly. Five of the six participants began regularly planning their essay before starting to write. All students wrote post-instruction essays that included all required essay elements. Maintenance essay data, however, was mixed with two students returning to baseline (Sexton et al., 1998). The researchers recommend booster sessions to help improve performance during maintenance (Sexton et al., 1998).

**Teaching Persuasive Writing**

Students with learning disabilities may have more difficulty with persuasive or argument writing than their peers (De La Paz, 2001a). Andrews, Torgerson, Low, and McGuinn (2009) completed a review of studies pertaining to argument writing. They included experimental studies that utilized different instructional methods, including SRSD. The authors closely analyzed eleven studies and identified guidelines that lead to effective instruction in argument writing. Many of these recommendations are included as part of SRSD instruction, such as encouraging students to plan, draft, edit and revise, emphasis on self-motivation, cognitive reasoning training, explicit instruction, scaffolded tools that help students plan their writing, defining goals, and having the teacher model and coach students through the processes (Andrews et al., 2009). Other guidelines that are not necessarily found in SRSD include collaboration and having students practice...
arguments out loud before writing. The findings of Andrews and colleagues support the idea that SRSD can be an effective instructional method for teaching argument writing. One of the mnemonics that is commonly used to teach argument writing is STOP and DARE.

STOP and DARE. STOP and DARE was developed by Susan De La Paz and Steve Graham to help middle and high school students write more sophisticated persuasive essays (De La Paz, 2001a). As students plan their writing, STOP and DARE encourages them to consider both sides of the issue and to include a counterargument in their essays. The first part of STOP and DARE is designed for planning the essay. STOP stands for Suspend judgment, Take a side, Organize ideas, Plan more as you write (De La Paz, 2001a). DARE reminds students of the four essay parts: Develop your topic sentence, Add supporting ideas, Reject possible arguments, and End with a conclusion (De La Paz, 2001a). STOP and DARE instruction is embedded in the six stages of SRSD as follows.

1. Discuss it: Explain the mnemonic, talk about any terms that students don’t know, and explain the steps.

2. Develop background knowledge: Discuss concepts that students may or may not already know, including what makes a good essay, what the essay parts are, and transition words.

3. Model it: Teachers model an essay using the STOP and DARE strategy, talking out loud and modeling self-regulatory statements.

4. Memorize it: Students memorize the mnemonic through different activities.
5. Support it: Students plan and write essays and teachers provide support and scaffolding as needed.

6. Independent Performance: Supports are gradually taken away as students become more independent with the strategy (De La Paz, 2001a).

STOP and DARE has been used effectively with students in elementary, middle, and high school.

**STOP and DARE in elementary school grades.** Although STOP and DARE was initially designed for middle and high school students, it has also been used with students in third through fifth grades (De La Paz & Graham, 1997b; Ennis, Jolivette, & Boden, 2013; Troia, Graham, & Harris, 1999). All three of these studies show positive results and significant improvements for the persuasive writing of the participants.

De La Paz and Graham (1997b) evaluated the impact of STOP and DARE on essay planning, length, number of essay elements, use of strategy, coherence, and quality of writing of three fifth grade students with LD. Students were taught individually using a multiple-probe across participants design. The number of essay elements, essay quality, and length of writing increased significantly (De La Paz & Graham, 1997b). However, only two students increased the amount of time spent planning (De La Paz & Graham, 1997b). The third student, who did not increase his planning time, was the student with the weakest writing skills at the beginning of the study. This result, with the weaker student making smaller improvements than other students, corroborates the findings of Monroe and Troia (2006).

Two years after De La Paz and Graham’s study, Troia et al. (1999) conducted another study with fifth grade students with LD. A multiple baseline across subjects
design was used, but the authors taught strategies for both essay and narrative writing to investigate whether the skills would generalize to a second genre (Troia et al., 1999). Students were taught in individual sessions, learning SPACE, STOP & LIST for story writing and DARE for essay writing. The authors conducted persuasive essay probes during baseline, post-instruction, and maintenance, but focused on story writing during instruction. Students wrote longer essays that contained more essay elements, showing that skills did generalize to essay writing. However, the quality of essays stayed low (Troia et al., 1999). The authors hypothesized that the quality was low because students were planning using an unstructured method rather than a more organized and structured one (Troia et al., 1999).

Unlike the two previous studies, which each had only three participants, Ennis et al. (2013) conducted a study including 24 students, who were students with emotional and behavioral disorders in third through sixth grade who lived in a residential facility. The researchers evaluated the impact of SRSD instruction using STOP & DARE for writing opinion essays. This was an experimental design with three dependent variables: essay length, number of essay elements, and quality of writing (Ennis et al., 2013). The researchers also investigated whether the results would generalize to a standardized writing assessment. There were 16 students in the intervention group and 9 students in the control group. They received instruction 2-3 days a week in 45-minute sessions. The students who received SRSD instruction improved in all areas (Ennis et al., 2013). The improvements were maintained after 6 weeks, but results did not generalize to the standardized test (Ennis et al., 2013). Limitations included nonrandom group assignment and a small sample size (Ennis et al., 2013). Although these studies show that STOP and
DARE can be effective with elementary school students, the majority of studies with STOP and DARE have been conducted with middle or high school students.

**STOP and DARE in middle school grades.** As the participants of the present study are in middle school, it is especially important to examine studies with this age group. De La Paz and Graham (1997) conducted an experimental study with four randomly assigned groups: students who were taught a strategy for planning, students who learned the strategy and dictated their essays, students who were not taught the strategy, and students who were not taught the strategy but did dictate their essay. There were 42 participants in fifth, sixth, and seventh grade receiving special education services for LD (De La Paz & Graham, 1997a). The authors assessed the impact of SRSD as well as dictation on students’ plans, transformations (changes from plans), essay length, number of essay elements, coherence, quality, rate of writing, and strategy usage (De La Paz & Graham, 1997a). Students in the experimental groups were taught the STOP and DARE strategy for opinion essays. Students who were in the control groups were taught the basic essay structure, qualities of a good essay, and they used sample essays as models (De La Paz & Graham, 1997a).

After receiving instruction, students who were taught the STOP and DARE strategy spent more time planning (De La Paz & Graham, 1997a). The students who dictated their writing improved the most, outperforming the other groups. The strongest improvements were in the group that combined dictation and strategy instruction (De La Paz & Graham, 1997a). The SRSD instruction did not benefit students who dictated more than students who wrote. Additionally, dictation did not make a significant difference in
the results of students in the two comparison groups at post-instruction (De La Paz & Graham, 1997a).

De La Paz (2005) also conducted an experimental study to examine the impact of the STOP & DARE mnemonic including eighth grade students with and without disabilities. The students with disabilities all had LD, except for one student who had hearing loss and anxiety-panic disorder. This study differs from previous studies, as in addition to teaching STOP & DARE to the language arts classes, SRSD instruction also took place in social studies classes to help students work with primary and secondary sources to understand complicated events in history (De La Paz, 2005). The 70 students in the experimental group learned the two strategies at the same time, which makes this study unique. There was a posttest-only control group of 63 students who did not receive any strategy instruction in either class. De La Paz predicted that students would improve their ability to comprehend the documents containing conflicting information as well as their ability to write argument essays (De La Paz, 2005).

After the intervention, students in the experimental group wrote essays that were significantly longer, higher quality, more accurate, and contained more arguments than those in the control group (De La Paz, 2005). Limitations included the fact that the control group did not spend as much time reading or writing about the history content, so they were not exposed to as much information as the experimental group (De La Paz, 2005). Additionally, the author discarded the data of 12 students who were unable to write 4 complete paragraphs during independent practice (De La Paz, 2005). This study shows that SRSD can be effectively used in multiple class settings to help students improve in different genres of writing. The STOP and DARE mnemonic has been shown
to be effective for students in middle school. There have also been many studies using STOP and DARE with students in high school.

**STOP and DARE in high school.** STOP and DARE has been studied with high school students, including various populations and settings. For example, students with emotional and behavioral disorders (EBD) have been participants in several studies (Ennis & Jolivette, 2014; Ennis, Jolivette, Terry, Fredrick, & Alberto 2015). In this section, studies involving high school students with EBD, ADHD, and LD will be discussed.

Ennis et al. (2015) conducted a study with students with EBD in a residential school. There were 44 participants who were in middle or high school; students served as their own control. Unlike other studies where instructional sessions took place three or more days per week, teachers led SRSD sessions two days a week. The authors wanted to see if instruction two days a week would lead to changes in student writing (Ennis et al., 2015). Students learned the STOP and DARE mnemonic for persuasive writing. The authors examined the impact of STOP and DARE on the number of correct word sequences, the number of essay elements, quality of writing, and academic engagement (Ennis et al., 2015).

The authors analyzed the data using a piecewise hierarchical linear model. The students made statistically significant improvements in all of the aspects of writing that were assessed, as well as in academic engagement (Ennis et al., 2015). Additionally, scores on the written subtests of the Woodcock Johnson III improved. The researchers compared growth by looking at baseline and intervention and compared the growth rates during each phase of the study. During the beginning of the intervention, the growth rate
was statistically significant. As students mastered the strategy, growth leveled off (Ennis et al., 2015). Limitations included issues with absences, withdrawals, and the fact that the researchers themselves were the ones to assess the essays. Data collection also lasted for 12 weeks, which means that some of the effects could have been due to normal student maturation and growth (Ennis et al., 2015).

A smaller number of participants were included in a study to assess the impact of SRSD on persuasive essays, motivation, and self-efficacy (Ennis & Jolivette, 2014). The participants included six ninth grade students with EBD who lived in a residential facility. The authors assessed the impact on the number of essay elements, quality of writing, and correct writing sequences; they also used ratings scales to measure students’ motivation and self-efficacy. Students were taught the STOP and DARE mnemonic in pairs during their health class two to three days per week, which used a multiple probe multiple baseline across pairs of participants design.

After instruction, students increased their number of essay elements and correct writing sequences and improved the quality of their essays (Ennis & Jolivette, 2014). This study was unique because of its use of motivation and self-efficacy as dependent variables, as well as its setting in the health classroom. Although previous studies had found that SRSD had a positive impact on motivation and self-efficacy, the results of this study were more mixed (Ennis & Jolivette, 2014). The researchers found that SRSD was effectively implemented in health class by using health-related essay topics (Ennis & Jolivette, 2014). Limitations included some missing data points because of students being transferred in or out of the residential facility (Ennis & Jolivette, 2014).

There have been several recent studies whose participants were high school
students with ADHD (Jacobson & Reid, 2010; Jacobson & Reid, 2012; Kiuhara, O’Neill, Hawken, & Graham, 2012). All three of these studies were multiple baseline across participants design. They all used STOP & DARE to teach students how to plan and write persuasive essays. Additionally, the students in all three studies showed significant improvement in persuasive essay writing. Kiuhara et al. (2012) added another mnemonic, AIMS, to make the strategy more applicable to high school students. Their study was also the only one of the three that conducted instruction with pairs of students rather than individually. The participants were 6 students with various disabilities, including two with ADHD, one with EBD, one with speech and language and developmental delays, and two with LD (Kiuhara et al., 2012).

Kiuhara et al. (2012) studied the impact of STOP, DARE, & AIMS on time spent planning, length of essays, and number of essay elements. AIMS was the new mnemonic that was included between STOP and DARE, and it was designed to help students write a better introduction. AIMS stands for Attract the reader’s attention, Identify the problem of the topic, Map the context of the problem, and State the thesis (Kiuhara et al., 2012). Students wrote essays during baseline, instruction, and post-instruction. Unlike other studies, the researchers continued to collect data during the instruction phase. After instruction, students spent more time planning and writing, wrote longer papers, included more essay elements, and wrote higher quality essays, and they maintained these improvements after two weeks (Kiuhara et al., 2012). Limitations included a small sample size and instruction taught by a researcher instead of a teacher. The present study will utilize a teacher for all instruction.
Jacobson and Reid (2010; 2012) conducted two different studies of high school students with ADHD. There were 4 participants in the 2012 study and 3 in the 2010 study. Both studies examined the impact of STOP and DARE on essay length, number of essay elements, time spent planning, and the holistic quality of the essays. However, the 2012 study also included the amount of time spent writing and the number of transition words as dependent variables. Both studies used a similar methodology, and instruction was individualized. Once the first student could write an essay independently with all the required parts, instruction with the next student began; students wrote three essays after instruction ended.

The students in the earlier study significantly improved the writing quality, length of essays, and number of essay elements they included (Jacobson & Reid, 2010). Participants also increased the amount of time they spent planning. Two of the three participants maintained these improvements at a 3-week maintenance check. Limitations of this study included the use of one to one instruction, no instruction in editing or revising, and a short maintenance period (Jacobson & Reid, 2010). Additionally, essays written during post-instruction were of low quality compared to samples written by peers without disabilities (Jacobson & Reid, 2010).

In 2012, Jacobson and Reid sought to replicate and extend their previous findings. The participants were four students who came from diverse backgrounds. One of the participants was female, while in the earlier study all of the participants were male (Jacobson & Reid, 2012). The authors emphasized the use of transition words during the SRSD stages. This explicit instruction appeared to have a positive impact on student writing (Jacobson & Reid, 2012). Students included more transitional words and phrases
in their essays after instruction was complete. Their essays were also longer, contained more essay elements, and were higher quality than before instruction (Jacobson & Reid, 2012). Maintenance essays were written at 2 and 4 weeks after instruction was completed. Planning time decreased slightly during this time, but it remained above baseline levels. Although students did increase the number of essay parts they included, no student actually included all the essay parts in a post-instruction essay (Jacobson & Reid, 2012). Limitations included the one to one setting, relatively short maintenance periods, the use of only one genre, not assessing generalization of the skills, and not addressing revision (Jacobson & Reid, 2012). These studies suggest that teaching STOP and DARE using the SRSD method can lead to improvement in the persuasive essay writing of students with ADHD.

A group of 15 high school sophomores with LD in a resource room class learned the mnemonic DARE in a study conducted by Chalk et al. (2005). The authors evaluated the impact of the strategy on the number of words written and the quality of the essays. This study different from others in its methodology, which utilized a repeated measures design. There were 8 probe conditions: baseline, pre-skill instruction, modeling, controlled practice, post-instruction, maintenance, and generalization (Chalk et al., 2005). Also unlike other studies, the researchers used a school rubric to assess quality rather than a holistic scale. Instruction was conducted in 5 sessions of 20-25 minutes each.

The researchers conducted a repeated-measures analysis of variance, with follow-up trend and pairwise comparisons (Chalk et al., 2005). After instruction, the quality of student essays improved. However, the more significant increase was in the number of words written. Limitations included the lack of a control group and the fact that the
students were not randomly assigned to the study (Chalk et al., 2005). This study suggests that SRSD, and more specifically the DARE mnemonic, can be used effectively in a resource room setting with students with LD.

**Summary**

SRSD was initially created in 1982 as a writing intervention for students with learning difficulties (Harris et al., 2008). This review of the literature reveals that SRSD can be an effective instructional model to improve students’ writing (Baker et al., 2009; Reid et al., 2014).

Although students with LD may have significant difficulties with writing, SRSD is a writing intervention with effectiveness that is well-supported by research (Gillespie & Graham, 2014; Graham & Perin, 2007). Moreover, studies show that SRSD can also be used with students who do not have disabilities (De La Paz & Graham, 2002; Harris et al., 2012).

Many researchers have shown SRSD to be effective for students with ADHD and/or LD (e.g. De La Paz, 2001; Monroe & Troia, 2006; Sexton et al., 1998). SRSD seems particularly well-suited to persuasive writing (Andrews et al., 2009). STOP and DARE is one mnemonic that has been used during SRSD instruction to help students plan and write argument essays (De La Paz, 2001). Many studies have shown STOP and DARE to be effective for improving student writing across grade levels and with students who have various disabilities (e.g. Ennis et al., 2013; Ennis et al., 2015; Jacobson & Reid, 2012; Troia et al., 1999).

The literature suggests that SRSD using the STOP and DARE mnemonic can be effective for students with disabilities. The present study seeks to replicate and extend the
findings of previous studies. Although many studies use researchers as the instructors, more research is needed that uses the teacher as the instructor. Additionally, the instruction will take place in small groups rather than individually, as recommended by Ennis and Jolivette (2014) and Kiuhara et al. (2012). The present study will evaluate the effectiveness of SRSD on the persuasive writing skills of seventh grade students in a pull-out special education language class. The impact of SRSD will be assessed based on the number of essay parts that students write, and by an analysis of the length and quality of student essays.
Chapter 3
Methodology

Setting

School. The study was conducted in a middle school in suburban New Jersey. The district has three schools: a high school, a middle school, and an elementary school. The middle school includes students in sixth through eighth grade. During the 2014-2015 school year, there were 490 students enrolled in the school. According to the NJ School Performance Report, 38.6% of the students in the school are Asian, 35.1% are white, 19.6% are Hispanic, 5.5% are black, 1.0% are identified as two or more races, and 0.2% are Pacific Islander (New Jersey Department of Education, 2016). During the 2014-2015 school year, 12% of the students were identified as having disabilities, 13.7% were considered economically disadvantaged, and 7.1% were identified as English Language Learners. During that year, the Partnership for Assessment of Readiness for College and Careers (PARCC) assessment was administered, and 72% of students met or exceeded expectations on the English Language Arts/Literacy portion. On the math portion of the assessment, 68% of students met or exceeded expectations.

Classroom. This study was conducted in a classroom designed for small group instruction. There are four computers as well as one laptop on a cart with a projector. The study took place in the students’ language arts class during period 7, which runs from 1:18-2:03 every day. This class is a special education class. All students in the study were classified as having a disability. Students were all in seventh grade at the time of the study.
Participants

Table 1 presents the basic information of the participants.

Table 1

*General Information of Participants*

<table>
<thead>
<tr>
<th>Student</th>
<th>Age</th>
<th>Grade</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>13</td>
<td>7</td>
<td>OHI</td>
</tr>
<tr>
<td>B</td>
<td>12</td>
<td>7</td>
<td>OHI</td>
</tr>
<tr>
<td>C</td>
<td>12</td>
<td>7</td>
<td>OHI</td>
</tr>
<tr>
<td>D</td>
<td>13</td>
<td>7</td>
<td>SLD</td>
</tr>
<tr>
<td>E</td>
<td>13</td>
<td>7</td>
<td>SLD</td>
</tr>
<tr>
<td>F</td>
<td>12</td>
<td>7</td>
<td>OHI</td>
</tr>
<tr>
<td>G</td>
<td>13</td>
<td>7</td>
<td>SLD</td>
</tr>
<tr>
<td>H</td>
<td>13</td>
<td>7</td>
<td>SLD</td>
</tr>
</tbody>
</table>

*Student A.* Student A is a 13 year old seventh grade Asian male who is classified with Other Health Impairment (OHI). In 2015, Student A was given the Woodcock-Johnson III Test of Achievement. He scored in the low average to low range on the Oral Language, Broad Reading, and Broad Written Language clusters. He did not meet expectations on the English Language Arts/Literacy portion of the PARCC test in Spring 2016. Student A completes homework regularly. In language arts, he earned a B+ and a B during the first two marking periods of the year.
**Student B.** Student B is a 12 year old seventh grade Hispanic female classified with OHI. In the spring of 2012, her scores on the Woodcock-Johnson III Tests of Achievement were in the average range for Broad Reading and Broad Written Language. In sixth grade, Student B was in a collaborative language arts class, but for seventh grade she was moved to a special education class. The collaborative class has one general education teacher and one special education teacher but follows the general education curriculum. Student B was moved to a special education language arts class, which is the class where the current study was conducted. This class is smaller than a collaborative class, and it is taught by a special education teacher using a modified curriculum. Student B did not meet expectations on the English Language Arts/Literacy portion of the PARCC test in Spring 2016. She earned grades in the B range during the first two marking periods of the year in Language Arts. Her homework completion is inconsistent.

**Student C.** Student C is a 12 year old Hispanic male in seventh grade classified as OHI due to a diagnosis of ADHD. At the time of the study he was taking medication to treat his ADHD. Student C has a one-to-one aide and a behavior plan that was designed by the district behaviorist. In March 2015, he took the Wechsler Intelligence Scale for Children (WISC-IV), where he scored in the very superior range for verbal reasoning and in the superior range for nonverbal reasoning. However, his general processing speed was shown to be in the borderline range. Student C completes about half of the homework assignments that are assigned. He earned a D+ for the first marking period of language arts and a B for the second marking period.
Student D. Student D is a 13 year old white male in seventh grade classified as having a specific learning disability (SLD). Based on his IEP, he uses a personal laptop to type all classwork and homework assignments. In December 2014, he took the Woodcock-Johnson III Tests of Achievement and scored in the average range for broad reading and oral language. On the broad written language cluster he scored in the below average range, and on the written expression cluster he scored in the low range. Student D completes his language arts homework assignments regularly, and he earned a B- and B for the first two marking periods, respectively.

Student E. Student E is a 13 year old Hispanic male in seventh grade, classified with SLD. In January 2015, he took the Woodcock-Johnson III Tests of Achievement and scored in the low average range on the Broad Oral Language cluster, earning a score of 84. His score for Broad Written Language was 85. In Spring 2016, he met expectations on the writing portion of the PARCC assessment, but not the reading portion. Student E earned a B- and B in language arts for the first two marking periods of the school year. He usually completes homework assignments in language arts.

Student F. Student F is a 12 year old white male seventh grade student classified with OHI. In November 2014, he took the Woodcock-Johnson III Tests of Achievement, and scored in the average range for Broad Written Language. In Spring 2016, he met expectations on the writing portion of the PARCC assessment, but not the reading portion. Student F earned a grade of B+ in language arts during both the first and second marking periods. He completes language arts homework regularly.
Student G. Student G is a 13 year old Hispanic male in seventh grade classified with SLD. In April 2015 he took the Woodcock-Johnson III Tests of Achievement, and scored in the low average range for Broad Written Language and Broad Reading. In Spring 2015, he met expectations on the writing portion of the PARCC assessment, but not the reading portion. He earned a B+ for the first two marking periods of language arts. Student G regularly completes his language arts homework.

Student H. Student H is a 13 year old white male student in seventh grade classified with SLD. The most recent evaluation is from September 2012, when he took the Wechsler Individual Achievement Test. His Written Language Composite score was in the below average range. He did not meet expectations on the English Language Arts/Literacy portion of the PARCC test in Spring 2016. In language arts, he earned a B+ for the first marking period and a B for the second marking period. Student H usually completes his language arts homework.

Materials

Essay prompts. The essay prompts that students responded to throughout each phase were randomly chosen from the list created by Harris, Graham, Mason, and Friedlander (2008). Students were given a sheet of paper with the typed prompt. The prompt was read aloud to the students. Then they wrote their essays on lined paper.

Lesson materials. Materials for each lesson were taken from the STOP and DARE lesson plans written by Harris, Graham, Mason, and Friedlander (2008). These included a mnemonic chart, STOP and DARE directions sheet, STOP and DARE checklist, sample essays, brainstorming sheet, linking words sheet, cue cards, and self-statements sheet.
**Survey.** At the end of the study, students completed a survey using a Likert scale of 1 (strongly disagree) to 5 (strongly agree). Students placed an X in the column for the number that best represented their feelings. Students rated statements regarding the usefulness, ease, and enjoyment of the STOP and DARE strategy. Figure 1 shows the survey that students completed.

**Directions:** Read each sentence below and place an X in the column you feel most accurately indicates your feelings.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Agree 5</th>
<th>Agree 4</th>
<th>Undecided 3</th>
<th>Disagree 2</th>
<th>Strongly Disagree 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It was easy for me to learn what the letters in STOP and DARE stand for.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Learning STOP and DARE helped me write better persuasive essays.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I would use the STOP and DARE strategy in other classes to write persuasive essays.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I enjoyed learning the STOP and DARE strategy in class.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I spend more time planning my persuasive essays now that I have learned the STOP and DARE strategy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I think learning STOP and DARE could help other students improve their persuasive essay writing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 1. Self-Regulated Strategy Development (STOP and DARE) Survey.*
Research Design

The study was conducted using a single-subject multiple baseline across participants design. During phase A, students wrote baseline essays. Phase A was followed by instruction in how to use STOP and DARE. Instruction was followed by phase B, the intervention phase in which students used STOP and DARE independently. Students were randomly placed into three groups, and following a multiple baseline design, groups were staggered from phase A, to instruction, and then to phase B. The independent variable was the STOP and DARE instruction. The dependent variables included the number of words in each essay, the number of essay parts that students included in each essay, and essay quality based on a holistic 7-point rubric.

Procedures

The study was conducted from January 2017 to March 2017. The baseline phase took place during the first three weeks of January. Students never wrote an essay on two consecutive days. Students were given the essay prompt on a typed sheet of paper, with the directions “Write a persuasive essay responding to the question below. Plan your essay before you begin writing. Make sure you include all the parts of a good persuasive essay, and write as much as you can.” Directions and prompts were also read aloud. Students were given 40 minutes to write the essay. No further instruction or help was given regarding how to write the essays. Students wrote the essays on lined paper, except for Student D who typed his essays using his laptop as required by his IEP.

The instructional phase for Group 1 began during the last week of January. Group 1 received small-group instruction with the teacher for 6 class periods. The following class period, all students wrote another essay responding to a prompt chosen at random.
The next day, the instructional phase for Group 2 began. This phase lasted for 6 days, during which Group 2 were taught using the same instruction and lessons as Group 1. The next class period, all students wrote another essay responding to a prompt chosen at random. The next class period was the first lesson for Group 3. The teacher taught Group 3 the same 6 lessons as the previous groups. Finally, all students wrote three more essays after Group 3 finished the lessons.

Lessons were highly structured and were taught according to the directions written by Harris, Graham, Mason, and Friedlander (2008). Lessons are described briefly below.

**Lesson 1.** During Lesson 1, the teacher reviewed the purpose of persuasive essays, which is for the writer to convince the audience to agree with him or her. The students and teacher discussed real-life examples, such as trying to convince one’s parents to agree to a certain curfew. Next, the teacher introduced and explained each letter in the mnemonic STOP. Figure 2 shows what each letter in the mnemonic represents.

<table>
<thead>
<tr>
<th>S</th>
<th>Suspend judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>Take a side</td>
</tr>
<tr>
<td>O</td>
<td>Organize ideas</td>
</tr>
<tr>
<td>P</td>
<td>Plan more as you write</td>
</tr>
</tbody>
</table>

_Figure 2. The STOP mnemonic._
Next, the students brainstormed what parts should be included in an essay. The teacher created a list and told the students which terms should be used to describe each part, including topic sentence, supporting ideas, argument, and conclusion. Students looked at a sample essay and identified where the essay parts were located. Next, the teacher introduced and explained the DARE mnemonic, which reminds students of the essay parts. Figure 3 presents the DARE mnemonic.

<table>
<thead>
<tr>
<th>D</th>
<th>Develop your topic sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Add supporting ideas</td>
</tr>
<tr>
<td>R</td>
<td>Reject arguments for the other side</td>
</tr>
<tr>
<td>E</td>
<td>End with a conclusion</td>
</tr>
</tbody>
</table>

*Figure 3. The DARE mnemonic.*

Students then read one of their own essays that they had written during the baseline phase. They completed a checklist for the essay parts to identify which ones they had included. Finally, students worked at memorizing the STOP and DARE mnemonics. The teacher asked for a volunteer to say what each letter stood for. If no student remembered, they could check the mnemonic chart.

**Lesson 2.** Lesson 2 began with a review of the STOP and DARE mnemonics. Then the students examined another sample essay and located the six essay parts. Next, the teacher modeled how to use the STOP and DARE mnemonics to write an essay. Using the brainstorming sheet and cue cards, the teacher modeled how to complete each
step of planning and writing an essay. The teacher modeled positive self-talk throughout, using statements such as “I like what I have so far,” and “This essay is going to be great!” When the teacher was done writing the essay, she used the checklist to check that she had completed all the steps and included all the essay parts. Next, the teacher explained the self-statements sheet. Students were encouraged to write down at least three statements that they could say to themselves: one before they begin writing, one while they work, and one when they are done writing. Finally, the students reviewed the STOP and DARE mnemonic and tried to repeat each letter from memory.

**Lesson 3.** Lesson 3 started with another review of the STOP and DARE mnemonic to see if students had memorized it. Students also were given time to finish writing their self-statements. Next, the teacher introduced the Linking Words list. Students identified linking words that were used in the sample essays. Students then set a goal for the group essay that they would be writing together during the lesson. The goal was to include all the essay parts. Then students were given a prompt and worked together to write an essay. The teacher prompted each step and asked for volunteers to explain each step. Then through collaboration and discussion, students dictated an essay that the teacher wrote down. Next, each student filled out a checklist for the group essay to evaluate whether all the essay parts were included. Finally, students practiced their memorization of STOP and DARE, as well as the cue cards.

**Lesson 4.** At the beginning of this lesson, students repeated the steps of STOP and DARE from memory, consulting their notes if needed. The teacher facilitated a brief discussion about whether the students have been thinking about or using STOP and DARE outside of class. Next, students created individual goals for the number of essay
parts in the day’s essay, based on their baseline essays. Students were then given a choice of two essay topics. Students wrote an essay using the brainstorming sheet, cue cards, directions sheet, chart, and linking words list. The teacher helped students if they skipped a step or did a step incorrectly. Finally, students reviewed their essays together. Students read their essays aloud to the group and filled out a checklist showing which parts were included. The teacher facilitated the discussion, asking students where missing parts could have been added. The teacher reminded the students that the goal is to include all the essay parts.

**Lesson 5.** Lesson 5 began with another assessment of whether students have memorized the steps of STOP and DARE. Next, the teacher showed the students how to make their own brainstorming sheet using lined paper so that they no longer needed to rely on the teacher-created worksheet. Students then set a goal for the day’s essay, based on how they did yesterday. They were given two choices for the essay topic. They planned and wrote an essay, creating their own brainstorming sheet based on the teacher’s model. After they were done writing, students read their essays to the group and discussed each one. They completed a checklist to see whether they reached their goal.

**Lesson 6.** Lesson 6 was the same as lesson 5. According to Harris, Graham, Mason, and Friedlander, lesson 5 should be repeated as many times as necessary until students reach criterion performance (2008). For the current study, criterion performance was defined as an essay that included the following parts: topic sentence, two or three supporting ideas, rejection of one argument for the other side, and a conclusion.
Measurement Procedures

All student essays were typed into Microsoft Word, with errors in spelling, capitalization, and punctuation corrected. The number of words in each essay was determined using the Word Count feature in the Microsoft Word program.

The number of essay parts in each essay was counted. Essay parts included a topic sentence, three supporting ideas, a rejection of an opposing argument, and a conclusion. Students were given credit for a topic sentence if there was a sentence that included the main idea and the student’s position on the issue. Supporting ideas included any reasons that made logical sense as support for the student’s viewpoint. To receive credit for rejecting an opposing argument, students needed to list a reason for the opposite side and also explain why it was wrong. Finally, a conclusion was counted if the student wrote at least one sentence towards the end of the essay that mentioned the topic and the student’s chosen side of the issue.

The quality of the essay was assessed using a seven point holistic rubric as shown in Figure 4. Essays were assessed by the teacher after they were typed.
<table>
<thead>
<tr>
<th>Score</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Highest quality: paragraphs are well organized, the essay responds to the question and gives supporting reasons and examples that make sense, ideas are explained using examples and details, essay is focused, sequenced in a logical order, and counter argument is strong. Vocabulary is strong, writing is in an academic style, sentence structure is varied and correct, grammar is correct.</td>
</tr>
<tr>
<td>6</td>
<td>High quality: organized into paragraphs, reasons are given but may not be fully explained. There may be some minor grammar or sentence structure errors.</td>
</tr>
<tr>
<td>5</td>
<td>Medium-high quality: Organization, focus, and explanation are lacking. However, reasons are included and logical. Opposing argument is present. Vocabulary and sentence structure may be basic.</td>
</tr>
<tr>
<td>4</td>
<td>Medium quality: Student has included some specific reasons. Student includes an opposing argument. Ideas may not be fully explained.</td>
</tr>
<tr>
<td>3</td>
<td>Medium-low quality: There are limited reasons, explanation is unclear, writing is unfocused. Grammar and sentence structure errors may make the essay difficult to comprehend.</td>
</tr>
<tr>
<td>2</td>
<td>Low quality: Position is unclear, there is minimal support for the student’s position, paragraphs may not be organized, grammar and/or sentence structure are weak.</td>
</tr>
<tr>
<td>1</td>
<td>Lowest quality: Student does not take a position, OR the student takes a position but does not support it.</td>
</tr>
<tr>
<td>0</td>
<td>No response or off topic.</td>
</tr>
</tbody>
</table>

*Figure 4. Holistic rubric for assessing essay quality.*

The Likert survey, as shown in Figure 2, was used to assess student satisfaction with the SRSD instruction. For each question, the total number of responses was counted for each answer choice.

**Data Analysis**

Each essay’s word count, number of parts, and quality were recorded on a spreadsheet. Each student’s mean and standard deviation were calculated for the dependent variables for each phase. The means for the baseline phase were compared to the means for the later phases. Graphs were used to visually analyze the data.
Chapter 4

Results

This single subject study utilized a multiple baseline across participants design to evaluate the effectiveness of SRSD on the persuasive writing skills of seventh grade students in a pull-out special education Language Arts class. Specifically, it investigated the effect of SRSD on the number of essay parts that students included, the quality of their essays, and the length of their essays. The students were taught the STOP and DARE strategy during six lessons. During the baseline phase, students wrote at least five essays. After learning the strategy, students entered Phase B, during which they wrote at least three essays. All essays were assessed for total number of words using the Word Count feature in Microsoft Word. The number of essay parts was counted for each essay. Essay quality was assessed using a 7-point holistic rubric.

Essay Length

The length of each essay was assessed using the Word Count feature of Microsoft Word. Means and standard deviations were calculated for each phase. Table 2 provides means and standard deviations for each student, while Table 3 provides the same information for the group of students. Figure 5 includes graphs of individual student data for essay length.
### Table 2

*Essay Length*

<table>
<thead>
<tr>
<th>Student</th>
<th>Phase A (Baseline)</th>
<th>Phase B (Intervention)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Student A</td>
<td>43.60</td>
<td>18.91</td>
</tr>
<tr>
<td>Student B</td>
<td>119.6</td>
<td>44.39</td>
</tr>
<tr>
<td>Student C</td>
<td>137.4</td>
<td>5.31</td>
</tr>
<tr>
<td>Student D</td>
<td>99.50</td>
<td>38.85</td>
</tr>
<tr>
<td>Student E</td>
<td>40.50</td>
<td>7.04</td>
</tr>
<tr>
<td>Student F</td>
<td>82.70</td>
<td>27.90</td>
</tr>
<tr>
<td>Student G</td>
<td>90.80</td>
<td>10.78</td>
</tr>
<tr>
<td>Student H</td>
<td>154.30</td>
<td>32.75</td>
</tr>
</tbody>
</table>

### Table 3

*Essay Length: Group Means and Standard Deviations*

<table>
<thead>
<tr>
<th>Phase A (Baseline)</th>
<th>Phase B (Intervention)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Group</td>
<td>96.05</td>
</tr>
</tbody>
</table>
Figure 5. Essay Length Results
Figure 5 (continued). Essay Length Results
All students increased the mean essay length from Phase A to Phase B. The group mean increased from 96.05 words during Phase A to 177.23 words during Phase B. Students A, B, and C entered intervention at the same time, writing essay six. A visual inspection of the data shows Student A and B followed a downward trend during baseline, and Student C remained consistent at baseline. Of note, both Student A and B wrote initial baseline essays that were similar in length to their intervention essays, yet declined as baseline continued. The data of all three students increased from the last baseline data point to the first intervention point. Next, students D, E and F entered intervention, writing essay seven. Student D wrote three of six baseline essays of similar length to intervention essays. Again all three students increased from the last baseline data point to the first intervention point. Finally, students G and H entered intervention, writing essays eight through ten. Baseline data for both students shows consistency. Student G data showed an immediate increase at intervention, and Student H showed an intervention increase at essay nine and ten. All students maintained the increased essay lengths throughout intervention.

**Number of Essay Parts**

The number of essay parts had a possible range of zero to six. Essays were assessed to determine how many essay parts students wrote. Essay parts included a topic sentence, three supporting reasons, a rejection of an argument from the other side, and a concluding sentence. Table 4 provides means and standard deviations for each student, while Table 5 provides the same information for the whole group of students. Figure 6 provides graphs of individual student results.
### Table 4

**Number of Essay Parts**

<table>
<thead>
<tr>
<th></th>
<th>Phase A (Baseline)</th>
<th>Phase B (Intervention)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Student A</td>
<td>2.60</td>
<td>1.02</td>
</tr>
<tr>
<td>Student B</td>
<td>3.40</td>
<td>0.80</td>
</tr>
<tr>
<td>Student C</td>
<td>3.00</td>
<td>0.89</td>
</tr>
<tr>
<td>Student D</td>
<td>3.17</td>
<td>1.07</td>
</tr>
<tr>
<td>Student E</td>
<td>2.33</td>
<td>0.74</td>
</tr>
<tr>
<td>Student F</td>
<td>2.83</td>
<td>1.57</td>
</tr>
<tr>
<td>Student G</td>
<td>3.17</td>
<td>0.90</td>
</tr>
<tr>
<td>Student H</td>
<td>3.33</td>
<td>0.45</td>
</tr>
</tbody>
</table>

### Table 5

**Number of Essay Parts: Group Means and Standard Deviations**

<table>
<thead>
<tr>
<th></th>
<th>Phase A (Baseline)</th>
<th>Phase B (Intervention)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Group</td>
<td>2.98</td>
<td>0.30</td>
</tr>
</tbody>
</table>
Figure 6. Number of Essay Parts Results
Figure 6 (continued). Number of Essay Parts Results
All students increased the number of essay parts they wrote. During Phase A, all students had means below 4. During Phase B, all students had means above 5. The group mean increased from 2.98 to 5.60. Students A, B, and C entered the intervention phase at the same time, writing essay six. Student A’s baseline data declined, while Student B’s baseline data was somewhat inconsistent. Student C’s baseline data showed an improvement during the phase. The data of all three students increased from the last baseline essay to the first intervention phase essay. Students A and B included either five or six essay parts in each intervention essay. However, Student C returned to baseline for essay nine, with an essay that included four parts. Students D, E, and F entered the intervention phase next, with essay seven. Students D and E both had generally stable baseline data, although both showed a decrease for essay five. However, Student F showed improvement throughout the baseline phase.

All three students showed an increase between the last baseline essay and the first intervention essay. Student D’s intervention essays were somewhat inconsistent, starting at five parts but dropping to four before increasing to six for the last essay. Student E’s four intervention phase essays all included six parts. Student F’s first intervention essay included five parts, which was the same as one of his baseline essays. Finally, Students G and H entered the intervention phase beginning with essay eight. Student G’s baseline data showed some variation, while Student H’s baseline data was consistent. Both students showed an increase from the last baseline essay to the first intervention essay. Student G wrote one intervention essay that included six parts, but the last two decreased to five parts. Student H’s intervention essays all included six essay parts.
Quality of Essays

Essay quality was assessed using a 7-point holistic rubric. Table 6 provides the means and standard deviations for each student, while Table 7 provides the same information for the whole group of students. Figure 7 provides graphs for individual student essay quality results.

Table 6

<table>
<thead>
<tr>
<th>Quality of Essays</th>
<th>Phase A (Baseline)</th>
<th></th>
<th>Phase B (Intervention)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Student A</td>
<td>2.00</td>
<td>0.63</td>
<td>3.67</td>
<td>0.47</td>
</tr>
<tr>
<td>Student B</td>
<td>2.60</td>
<td>0.49</td>
<td>5.00</td>
<td>1.26</td>
</tr>
<tr>
<td>Student C</td>
<td>2.40</td>
<td>1.02</td>
<td>5.50</td>
<td>0.87</td>
</tr>
<tr>
<td>Student D</td>
<td>2.00</td>
<td>0.58</td>
<td>3.75</td>
<td>0.43</td>
</tr>
<tr>
<td>Student E</td>
<td>1.83</td>
<td>0.37</td>
<td>4.50</td>
<td>0.50</td>
</tr>
<tr>
<td>Student F</td>
<td>2.00</td>
<td>0.82</td>
<td>4.75</td>
<td>0.83</td>
</tr>
<tr>
<td>Student G</td>
<td>2.67</td>
<td>0.75</td>
<td>4.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Student H</td>
<td>2.86</td>
<td>0.35</td>
<td>5.33</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Table 7

<table>
<thead>
<tr>
<th>Quality of Essays: Group Means and Standard Deviations</th>
<th>Phase A (Baseline)</th>
<th></th>
<th>Phase B (Intervention)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Group</td>
<td>2.29</td>
<td>0.21</td>
<td>4.56</td>
<td>0.35</td>
</tr>
</tbody>
</table>
Figure 7. Quality of Essays Results
All students wrote higher quality essays during Phase B compared with Phase A. During Phase A, all student means fell below 3 (group M=2.29). During Phase B, all students’ means were above 3 (group M=4.56). Students A, B, and C entered the intervention phase at the same time, writing essay six. Students A and B’s essay quality declined during baseline, while Student C’s essay quality generally increased. The essay quality of all three students increased when they entered the intervention phase. However, all three students wrote one or more essays during intervention that returned to the same quality as baseline essays. Of note is Student C’s drop to a quality level of 4 for essay
nine after an absence prevented him from writing essay eight. Students D, E, and F entered the intervention phase next, beginning with essay seven. Students D and E show a similar pattern during baseline, writing essays of consistent quality, dropping for essay five, then slightly increasing for essay six. Student F gradually improved during baseline.

All three students improved from their last baseline essays to their first intervention essays. Student D wrote one essay during intervention that was the same quality as his last baseline essay. However, Students E and F maintained their improvements and did not return to baseline level quality. Finally, Students G and H entered the intervention phase beginning with essay eight. Student G wrote baseline essays of widely varying quality, showing a dramatic increase in the last baseline essay. Student H’s baseline data was consistent. Student G’s essay quality did not improve from the baseline to intervention phase, but the increase that was achieved in the last baseline essay was maintained during intervention. Student H’s essay quality increased from the last baseline essay to the first intervention essay and did not return to baseline levels.

**Student Surveys**

All eight students completed an intervention satisfaction survey after writing the last essay of Phase B. Students rated the statements using a Likert scale of 1 through 5, with a score of 5 indicating “strongly agree,” 4 “agree,” 3 “undecided,” 2 “disagree,” and 1 “strongly disagree.” Table 8 provides the percent of students who responded with each answer on the survey. Table 9 provides the mean score for each statement.
Table 8

Likert Survey Results: Percentages

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Agree (%)</th>
<th>Agree (%)</th>
<th>Undecided (%)</th>
<th>Disagree (%)</th>
<th>Strongly Disagree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. It was easy for me to learn what the letters in STOP and DARE stand for.</td>
<td>37.5</td>
<td>25.0</td>
<td>37.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Learning STOP and DARE helped me write better persuasive essays.</td>
<td>50.0</td>
<td>37.5</td>
<td>12.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. I would use the STOP and DARE strategy in other classes to write persuasive essays.</td>
<td>25.0</td>
<td>75.0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. I enjoyed learning the STOP and DARE strategy in class.</td>
<td>50.0</td>
<td>25.0</td>
<td>12.5</td>
<td>0</td>
<td>12.5</td>
</tr>
<tr>
<td>5. I spend more time planning my persuasive essays now that I have learned the STOP and DARE strategy.</td>
<td>37.5</td>
<td>25.0</td>
<td>12.5</td>
<td>25.0</td>
<td>0</td>
</tr>
<tr>
<td>6. I think learning STOP and DARE could help other students improve their persuasive essay writing.</td>
<td>62.5</td>
<td>12.5</td>
<td>25</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 9

*Likert Survey Results: Means*

<table>
<thead>
<tr>
<th>Statements</th>
<th>Mean Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It was easy for me to learn what the letters in STOP and DARE stand for.</td>
<td>4.00</td>
</tr>
<tr>
<td>2. Learning STOP and DARE helped me write better persuasive essays.</td>
<td>4.38</td>
</tr>
<tr>
<td>3. I would use the STOP and DARE strategy in other classes to write</td>
<td>4.25</td>
</tr>
<tr>
<td>persuasive essays.</td>
<td></td>
</tr>
<tr>
<td>4. I enjoyed learning the STOP and DARE strategy in class.</td>
<td>4.00</td>
</tr>
<tr>
<td>5. I spend more time planning my persuasive essays now that I have</td>
<td>3.75</td>
</tr>
<tr>
<td>learned the STOP and DARE strategy.</td>
<td></td>
</tr>
<tr>
<td>6. I think learning STOP and DARE could help other students improve their</td>
<td>4.38</td>
</tr>
<tr>
<td>persuasive essay writing.</td>
<td></td>
</tr>
</tbody>
</table>

Overall, the mean scores are 4 or above for five of the six statements. A response of at least 4 indicated that the students either agreed or strongly agreed with the statement. The only statement that received a mean score below 4 was “I spend more time planning my persuasive essays now that I have learned the STOP and DARE
strategy” (M = 3.75). The statements with the highest mean responses were “Learning STOP and DARE helped me write better persuasive essays” and “I think learning STOP and DARE could help other students improve their essay writing,” which both had a mean of 4.38.

There were two statements that received at least one response of 1 or 2, which represented “strongly disagree” and “disagree” respectively. These two statements were “I spend more time planning my persuasive essays now that I have learned the STOP and DARE strategy,” which 25% of students responded to with a score of 2, and “I enjoyed learning the STOP and DARE strategy in class,” which 12.5% of students responded to with a score of 1.
Chapter 5

Discussion

The purpose of the present study was to investigate the effect of the SRSD instructional model on the writing of seventh grade students with disabilities, specifically using the STOP and DARE strategy for persuasive essays. The study investigated the effects of SRSD on the length, quality, and number of parts of essays written by students with disabilities, as well as the social validity of the SRSD instructional model.

Findings

All students increased the mean essay length after receiving the STOP and DARE instruction. All students except Students F and H demonstrated dramatic increases after the final baseline essay. This suggests that the intervention was effective in increasing essay length. These results corroborate prior research that also demonstrated increases in mean essay length after STOP and DARE instruction (De La Paz & Graham, 1997; Jacobson & Reid, 2010; Jacobson & Reid, 2012; and Ennis, Jolivette, & Boden, 2013). Of note, Students A, B, and D showed a decline in essay length during the baseline phase. This suggests that Students A, B, and D may have become fatigued as they wrote each consecutive essay. In contrast, Students G and H increased essay length during the baseline period. Students G and H were in the last group to receive instruction, so they completed more baseline essays than the other groups. Therefore, the increase in essay length during the baseline phase may be due to the extra practice. Student A, B, D, and H wrote first baseline essays of similar length as essays that they wrote during the intervention phase. This suggests that they may have been enthusiastic about writing as much as they could when they were given the first baseline essay assignment, but their
stamina decreased as time went on. Regardless, Students A, B, and D did show improvement between the last baseline essay and the first intervention, which suggests that the STOP and DARE strategy was effective. Overall, students wrote longer essays on average after they received SRSD instruction.

There was a similarly notable improvement in the number of essay parts that students included in their essays during the intervention phase. Students were expected to include a maximum of six essay parts. All means increased from the baseline to intervention phase. No student included a score of four or more essay parts during the baseline phase, which shows that students did not include at least two parts before receiving instruction. During the intervention phase, all students included a mean score of five or more essay parts. This suggests that the STOP and DARE instruction was effective in improving the number of essay parts that students included. These results corroborate those found in the literature, including De La Paz and Graham (1997) Jacobson and Reid (2012) Ennis, Jolivette, and Boden (2013) and Ennis and Jolivette (2014).

In terms of essay parts, patterns were found that were similar to those in essay length. For example, Students A and E showed declining baselines, possibly due to fatigue. Students B, C, and F increased the number of essay parts during the baseline phase, possibly due to the continued practice. The students who started out writing essays with more parts did not show increases as dramatic as some other students, and sometimes they included the same number of parts in a baseline essay as they had in an intervention essay. For example, Students C and D wrote two or three baseline essays with four parts and one intervention essay with four parts. Student F wrote one essay with
five parts during baseline and his first intervention essay had five parts, but then he increased to six for the rest of the intervention phase. This suggests that Students C, D, and F already knew most of the essay parts but had trouble remembering to include the new ones they had learned. In contrast, students who included few essay parts in the baseline phase showed dramatic increases. For example, Student H wrote essays with three or four parts during baseline and then wrote intervention essays that had all six. Student E never wrote more than three parts during the baseline phase and then during intervention all the essays included six parts. This suggests that the STOP and DARE instruction was especially helpful for students who were unfamiliar with the parts of a persuasive essay. It is important to note, however, that only two students included all six parts for every intervention essay. Jacobson and Reid (2010) found that two of the three students in their study included all six parts in every intervention essay. However, in Jacobson and Reid’s 2012 study, no student, out of four total, included all the essay parts. Similarly, Kiuhara, O’Neill, Hawken, and Graham (2012) found that students were sometimes missing one essay part during the intervention phase. The present study corroborates these previous studies, which all found that students sometimes did not include all of the essay parts even after receiving SRSD instruction.

Students in the present study showed significant improvement in essay quality. During baseline, all students wrote essays that averaged less than 3, on a 7-point scale. During the intervention phase, all means were above 3. All students except Student G increased from the last baseline to the first intervention. This suggests that the STOP and DARE instruction helped students improve essay quality. Student G showed an increase in the last two baseline essays, and then maintained this increase for all of the
intervention essays. This might suggest that the continued writing practice, or possibly overhearing some of the instruction, allowed Student G to improve writing quality for the last baseline essay.

Although mean essay quality increased for all students, essay quality for many students was inconsistent during intervention. Student E’s essay quality actually decreased during the intervention period. Perhaps this was due to fatigue or lack of effort as the days and weeks passed. Also of note, Student C demonstrated a significant drop from Essay 7 to Essay 9. He was absent for Essay 8. It is possible that having the extra time pass between essays caused essay quality to decline. Additionally, Student B’s first intervention essay earned a quality score of 3, which is the same quality as some of her baseline essays, however, the rest of her intervention essays were quality scores of 6. This suggests that she was able to write higher quality essays after receiving the instruction, but perhaps needed more practice beyond the first intervention essay. The increases in essay quality corroborate the results of De La Paz and Graham (1997) who also found that students increased essay quality using STOP and DARE. Likewise, Jacobson and Reid (2010) and Ennis and Jolivette (2014) found that holistic quality increased for all students after they received SRSD instruction.

The majority of students either agreed or strongly agreed with all of the statements on the intervention satisfaction survey. This suggests that they found the instruction to be helpful and acceptable. The statement with the lowest mean rating was “I spend more time planning my persuasive essays now that I have learned the STOP and DARE strategy.” This might suggest that students did not truly learn or understand the importance of planning, even though it was emphasized during the lessons, or perhaps
STOP and DARE provided students the tools to plan faster. Of note, anecdotal observations by the teacher showed that many students did plan their essays during the intervention period, while many did not plan during the baseline period. Further research in the effect of SRSD instruction on planning is recommended. Most students reported that they felt it was easy to learn the strategy and that it helped them write better essays. No students disagreed with either of these statements. This suggests that students felt the instruction was valuable and useful. All students either agreed or strongly agreed that they would use the strategy in other classes, which suggests that they believed it was applicable for other classes. A majority of students either agreed or strongly agreed that STOP and DARE could help other students, which suggests that they felt it was a valid instructional strategy that should be used for future classes. These positive results for the social validity of STOP and DARE instruction corroborate the findings of Ennis and Jolivette (2014) and Kiuhara et al. (2012).

Limitations

One limitation of this study was the classroom setting constraints. Students were all in one room together, so they may have overheard or observed some of the small group instruction taking place on the opposite side of the classroom. This may have impacted baseline data for students who were not in the first instructional group. Additionally, there were a few gaps in intervention data due to student absences. All students did write at least three intervention essays. Another limitation of this study was that the instruction did not cover editing and revising, which may have affected essay quality. Maintenance was also not assessed, so students’ ability to retain the knowledge
and skills was not measured. Further research is recommended on students’ ability to maintain improvements after SRSD instruction.

Another limitation to this study is the time frame in which it was conducted. A limited time frame between university IRB approval and the end of the school year led to the lessons being scheduled for consecutive days rather than two or three times a week as in previous studies. The baseline phase was also limited by time, so students were writing several essays a week in order to complete five baseline essays. This may have caused baseline essay length and quality to decline. Finally, a limitation inherent to single subject design is small sample size. This study was conducted with eight students. Data from this study may not be generalizable beyond this number of participants, and additional research with a larger sample size is warranted.

**Implications and Recommendations**

The results suggest that it might be beneficial to rethink the way that writing is taught in the special education middle school class. Perhaps the writer's workshop model should not be used exclusively as it often is in the general education classroom. In the present study, students with disabilities were able to remember all six persuasive essay parts when they used the mnemonic STOP and DARE. Special education teachers may need to consider using explicit research-based instructional models such as SRSD instead of merely modifying the general education curriculum. Students with disabilities may benefit more from the use of structured direct instruction as in SRSD.

The results also suggest that writing too many essays in a short span of time may cause students to be fatigued and to actually lose stamina, resulting in shorter essays. Students demonstrated improvement during the intervention period, which suggests that
SRSD might help students improve their ability to write longer, more complete essays of higher quality. Students found the strategy helpful and stated that it could be helpful for other students and in other writing situations. This suggests that future students may be receptive to SRSD instruction.

The present study corroborates findings from the literature. However, more research is needed. Long-term studies that include collection of maintenance data to assess whether improvements are maintained over time are warranted. Additionally, research should be conducted using other genres of writing, such as expository essays. Finally, research using larger groups of students, as well as with groups that include students without disabilities, should be conducted.

**Conclusions**

The present study supports the use of SRSD with students with disabilities such as LD and ADHD. After receiving SRSD instruction using the STOP and DARE mnemonic, mean essay length increased, as did the number of essay parts and essay quality. Social validity was confirmed with the use of an intervention satisfaction survey. SRSD instruction, specifically the STOP and DARE mnemonic, seems to be an effective research-based strategy that can be used in classrooms with students with disabilities.
References


