The effect of self-regulated strategy development on the writing of seventh-grade students with exceptional education needs

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THE EFFECT OF SELF-REGULATED STRATEGY DEVELOPMENT ON THE WRITING OF SEVENTH-GRADE STUDENTS WITH EXCEPTIONAL EDUCATION NEEDS

By

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Chapter 1

Introduction

In my experience teaching language arts classes to seventh-grade students with special education needs, I learned that many students are unable independently to generate ideas and gather their thoughts in order to produce clear and coherent writing. This problem needed to be addressed through research because many of these same students can verbalize their ideas, but when faced with a piece of paper or computer keyboard will experience great difficulty turning those ideas into a written product. As students get older, they are expected to express their thoughts and arguments through their writing, and to be more independent in their writing during class periods, in testing situations, and on their homework. An inability to communicate effectively via the written word may hinder a student’s educational and career opportunities, even when the student might otherwise be fully qualified based on intellectual abilities.

Purpose of the Study

The purpose of this study was to determine the effect of Self-Regulated Strategy Development (SRSD) on the writing of students with exceptional education needs. Would teaching the methods of SRSD to seventh-grade students with exceptional education needs prove valuable in improving the clarity and quality of their writing?

In order to determine the effects of this approach on students’ writing, four students wrote one persuasive essay and one research report during the 2013 – 2014 academic year (pre-instruction in SRSD). These essays were evaluated by the researcher and self-evaluated by each student according to an evaluation rubric (see Appendix A) based on the work of Harris, Graham, Mason, and Friedlander (2008, p. 373).
Students then received instruction in SRSD. The instruction aimed to increase metacognition, teach students specific self-talk and self-monitoring skills, and provide explicit instruction in composition development and revision strategies for persuasive essays and research reports.

Upon completion of each unit of instruction (research report and persuasive essay), the students wrote a corresponding essay and or revised an existing one using the strategies that were taught. These essays were then evaluated by the researcher and self-evaluated by each student according to the same evaluation rubric. The pre-, and post-instruction writing scores were then compared to determine whether any statistically significant improvement occurred.

By evaluating the effectiveness of this instruction, I was able to determine whether I should continue using this method with students. This research will contribute to educators’ understanding of how the SRSD approach works and its effectiveness with seventh-grade students with exceptional education needs. Other educators would be able to use the results of this research to aid in their decision of whether they should spend valuable class time teaching this writing method. If SRSD should prove useful with this population, more educators may devote their time and resources to learning and teaching this method; if not, educators could more efficiently spend their time following another method or plan for teaching writing skills.

Scope and Limitations

One of the primary weaknesses of this study was its small sample size. This study was conducted with four students who attended the same reading and language arts class together every day. Of the students participating: two were of Caucasian descent and two were of Hispanic descent. Three of the students were male; one was female. This small sample size meant that broad generalization to all populations would be unwise. Additionally, the researcher
was unable to control for student absences, nor for the disruption caused by extended school-wide standardized testing during the study. In order to mitigate the effect of this disruption, the researcher scheduled the class times as consistently as possible, while still allowing for this protracted testing.

This study assumed that any improvement would be directly related to the implementation of the SRSD method. Since other factors, such as: a student’s natural maturation; an increase or decrease in the student’s motivation; or a deterioration of a student’s home situation could affect the growth (or stagnation) of a student’s writing ability, the internal validity of this action research project is low. The external validity of this research is somewhat low; given the small sample size, the generalizability of this study to all populations cannot be confidently assumed. Finally, the construct validity is limited by the instructor’s ability to implement SRSD instruction with fidelity.

Definitions

**Self-Regulated Strategy Development (SRSD).** An evidence-based approach to writing instruction which utilizes teacher-led modeling and scaffolding to teach students how to monitor their own success in generating and editing effective writing as outlined by Harris et al. (2008).

Summary

Students with exceptional education needs often struggle to create coherent writing, even when those students have valuable ideas that they can verbalize. This area of challenge may limit students’ educational and career opportunities. This study was designed and conducted to assess the effectiveness of SRSD on the writing skills of students with exceptional education needs. This research has implications for other educators teaching writing strategies; however, there are limitations on this study’s generalizability due to its sample size limitations. SRSD is defined as
an evidence-based writing instruction method that focuses on teacher-led modeling and extensive scaffolding. Due to sample size limitations, this study’s internal and external validity are somewhat low; its construct validity is limited by the instructor’s ability to teach SRSD to the students with fidelity to the method’s intended strategies.
Chapter 2

Theoretical Framework

Many of the nation’s students struggle with writing tasks, but students with identified disabilities have even greater challenges with writing (Gersten & Baker, 2001). On the 2011 Writing Assessment of the National Assessment of Education Progress (NAEP), only 28% of eighth-grade students without an IEP scored at or above the Proficient level; only 3% of students with an IEP had scores that were this high (National Center for Education, 2012). Students who have scored at the Proficient level “have demonstrated competency over challenging subject matter.” (NCE, 2012, p. 7) When students who demonstrated a “partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade” (NCE, 2012, p. 7) were included, 84% of students without identified disabilities scored at or above the Basic level, while only 37% of students with IEPs demonstrated writing with at least this limited level of competency (NCE, 2012).

“Natural” approaches to teaching writing, like the Whole Language movement, emphasize writing through exposure to good writing in naturally occurring contexts versus direct instruction. Some teachers and researchers believe that using textbooks to teach language skills is comparable to a “straightjacket” (Goodman, 1992), and that students learn best through collaborative instruction. Still, this informal method of teaching writing does not reach every student. For those students who find writing challenging, a more direct approach may prove to be more helpful. (Graham & Harris, 1997)

History

Even though educators agree that writing instruction is important, few devote a large amount of time to explicit writing instruction, relying instead on writing skills to develop
naturally in students (Graham & Harris, 1997). By comparison, much larger amounts of time are devoted to math instruction than writing instruction (Baker, Gersten, & Graham, 2003).

**Research Studies**

Self-Regulated Strategy Development is one method of direct writing instruction that has been the subject of several studies and has been found to improve the writing of students with emotional/behavioral disorders (EBD). (Ennis, Jolivette, & Boden, 2013; Lane, Harris, Weisenbach, Brindle, & Morphy, 2008; Lienemann & Reid, 2008; Mason & Shriner, 2008). Research has shown SRSD effective with younger elementary students (Lane, et al. 2008; Santangelo, Harris, & Graham, 2008; Tracy & Graham, 2009), with older high school students (Hoover, Kubina, & Mason, 2012) and with community college students (Macarthur & Philippakos, 2013). Conversely, there is a dearth of research conducted to study the effects of SRSD on middle school students who have been identified as having a specific learning disability (SLD) and/or Attention Deficit Hyperactivity Disorder (ADHD).
Chapter 3

Design

This research project was a quasi-experimental, quantitative study. The independent variable was the SRSD instruction given to the students. The dependent variable was the students’ writing scores on the Evaluation Rubric (student self-evaluation and researcher evaluation). Controls were put in place to ensure internal validity. First, only one instructor provided the SRSD instruction so that the intervention was being implemented with fidelity. Second, data were collected only on the students whose parents signed and returned the informed consent agreement, even though all students in the language arts classes received the same instruction and test. The instruction and testing took place in the students’ natural classroom setting.

An interaction between testing and treatment occurred; the pre-SRSD instruction given by the researcher was designed to produce improvement in students’ writing outcomes; the SRSD instruction was designed to have the same positive effect.

Sample

The participants in the study were 12- to 14-year-old seventh-grade students with IEPs. Three students were identified with SLD, one student was diagnosed with ADHD, and one student received speech and language services. One female student and three male students comprised the sample. All four were in whole or in part, Caucasian; two students were Hispanic. The students attended middle school in an affluent suburb of Milwaukee, Wisconsin. In order to ensure confidentiality, each student was referred to by randomly generated 5-digit number. The participants were a sample of convenience. They were students in one of two language arts classes that the researcher taught during the 2013-2014 school year.
Procedures

The research was conducted over 25, 43-minute sessions during a period of nine weeks. For the SRSD research paper intervention, the students spent 14, 43-minute sessions over a total of five weeks. The students spent three, 43-minute sessions on the pre-intervention writing; nine, 43-minute sessions on the SRSD instruction; and two, 43-minute sessions on the post-intervention writing and evaluating. For the SRSD persuasive essay intervention, the students spent a total of 11, 43-minute sessions over a total of four weeks. The students spent two, 43-minute sessions on the pre-intervention writing; seven, 43-minute sessions on the SRSD instruction; and two, 43-minute sessions on the post-intervention writing and evaluating.

The researcher evaluated and scored the research papers and essays according to the Evaluation Rubric (Appendix A). The students self-evaluated and scored their own research papers and essays using the same Evaluation Rubric. Students were instructed in the techniques of SRSD for writing a research paper and revising a persuasive essay. After the students received the instruction in writing a research paper, each wrote a second research paper. Then, the students received instruction in revising a persuasive essay. After this instruction, they were given their original persuasive essays to revise using the newly taught techniques. Again, the researcher evaluated and scored all the papers using the Evaluation Rubric, and students self-evaluated and scored both essays using the same Evaluation Rubric. The pre-, and post-intervention scores were then compared to determine the effect of the information on the students’ writing.

Research Paper

For the pre-intervention research paper, students were instructed to write a paper of approximately three to five paragraphs on any person, animal, or state of their choice. They were
told that they would be completing their research and writing independently, and that this would provide the instructor with an opportunity to see how well each student could perform independently. Students were encouraged to use any resource they might have that would be helpful to them (dictionaries, previous notes they may have written in their notebooks, etc.) so that they could write the best papers possible. They were encouraged to think silently about what good, informational writing looked like, and to remember any steps they knew that good writers follow. Students were given one, 43-minute class period to complete their research, either in the school library or online using the school computers. They were then given two additional 43-minute class periods in which to complete their writing and editing using standard word processing software on the computers in the classroom.

After the students completed their papers, the instructor distributed the Evaluation Rubric to the class. The instructor discussed each scoring element and some guidelines for determining standards for each numerical value. Students were asked to evaluate their own papers using the rubric, and were informed that their self-evaluation scores would have no effect on their grades for their papers.

Students received nine, 43-minute sessions of instruction in the TWA strategy outlined by Harris et al. (2008). TWA stands for, “Think Before Reading; Think While Reading; Think After Reading.” Throughout all nine sessions, the instructor followed the suggested, scripted dialogue on pages 392 – 412 (Harris, et al., 2008).

The first lesson took two sessions to complete. The instructor prepared the students by telling them that they were going to learn how to write research reports, primarily for science or social studies. Then they were told that in order to write about a topic, they would first discuss how to read informational text by learning a “‘trick’ for reading” (p. 392). The instructor
introduced the TWA strategy using a mnemonic chart (p. 420) discussing the three main steps and nine sub-steps, and how to use the strategy throughout all phases of reading informational text (Appendix B). Students were then asked to restate the steps of the strategy and write them on their own sheets of paper, which they were then encouraged to take home to study. At the end of the second class, students were given a copy of the mnemonic and a folder for materials in the classroom.

At the beginning of the next session, students were asked to recall the TWA steps from memory and write them. The instructor then modeled the TWA strategy with a think-aloud for a provided passage, “Gum” (p. 399). The students followed along highlighting main ideas, underlining supporting details, and checking off completed steps on their TWA Checklists (p. 422). Students were then provided with a TWA Self-Statements sheet (p. 423). The instructor modeled several self-statements and asked students to write one or two self-statements on their sheets that might help them get past a point where they would otherwise get stuck. Students were then asked to practice identifying the steps for TWA by memory, and were told that they would be quizzed on the TWA steps in the near future.

Lesson three was structured in a very similar way; however, the students now collaborated with the instructor in the think-alouds and in verbally summarizing the information. In lesson four, students were paired up and instructed to complete the steps by alternating paragraphs, and to help each other only when necessary. In lesson five, the instructor modeled the process of writing notes by paraphrasing. The instructor stressed how important it was not to use the author’s words. In lesson six, students were paired and instructed to complete a written summary of the assigned text by alternating paragraphs, helping each other only when needed. Lesson seven also took two, 43-minute sessions. In this lesson, students took a quiz in which
they wrote out every main step and all nine sub-steps of the TWA strategy. Then, students were given an article and asked to complete their own written summaries of the article independently. They were told that this would be in preparation for writing their final mini-research essays and were encouraged to ask any questions they might have during this final exercise. When a student was absent from a session, he or she was given individual instruction in order to ensure that all students received the same information.

After instruction in the TWA strategy, students were told that they would write another independent research paper. This time, students were given an article about the history of jazz in the United States (McLaughlin, 2012). They were allowed two, 43-minute class periods in which to complete the research and writing process using the classroom computers. Students were told that this would determine how they wrote independently. The instructor did not provide any instruction nor answer any questions.

After students completed their research papers, they were provided with the Evaluation Rubric and were reminded what the individual scoring categories meant. They were asked to evaluate their own papers.

Persuasive Essay

For the pre-intervention persuasive essay, students were instructed to write a three- to five-paragraph essay on the following prompt: “Racial slurs should be made illegal. (Agree or disagree?).” The instructor told the students that they were to do their best, but that the instructor would not provide assistance during the process: this paper would show the instructor what each student was able to do independently. Students were instructed to think about what they already knew about good writing in general, the writing process, and what makes a good persuasive essay. Students were then given two 43-minute class periods to complete the writing and editing
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using standard word processing computer software. After the students completed their papers, the instructor distributed the Evaluation Rubrics, asked the students to evaluate their own work, and reminded the students that their self-evaluation scores would not have any effect on the grades for their papers.

Students were provided instruction in the SCAN strategy (Does it Make Sense? Is it Connected to My Belief? Can I Add more? Note errors) (p. 268) in seven, 43-minute sessions. Throughout all sessions, students received reinforcement for the idea that revision was a positive step in the writing process, and that all writers, even professional writers, revise over and over again in order to make their writing the very best it could be. During the first lesson, students were introduced to the strategy using notecards of the SCAN steps (p. 282) and a checklist titled, “Eight Steps for Revising Checklist” (see Appendix C). This checklist was based on the “Six Steps for Revising Checklist” provided by Harris et al. (p. 280); however, it was modified by the researcher to reflect two additional steps that are required for persuasive essays written by students at this school. This modified version inserted additions for Step 4 (Tell one reason why someone else might disagree with you) and Step 5 (Explain why that disagreement doesn’t make as much sense as your belief), then proceeds with the original steps. This necessitated an eight-step checklist as opposed to the original six-step one. The instructor explained the eight steps, and how to apply the SCAN steps to each sentence in an essay. The students were then told that they would be tested on the revision steps in the near future, and were asked to help each other name the steps in order.

In lesson two, the instructor modeled the eight steps with the SCAN strategy by walking through the steps with a persuasive essay doing a think aloud. Students were asked to write down self-statements they could use to help themselves through trouble spots during the revision
process. In lesson three, the instructor reviewed the revision steps, then the class participated in a “rapid fire” memorization session (p. 272); first with cue cards, then without them. After the rapid fire session, students were reminded that they would be required to list all the steps by memory in the near future. Those students who wished to were allowed to demonstrate their progress in memorizing the steps by reciting them aloud to the class. For lessons four and five, students practiced revising previously written essays with a partner, jointly making corrections, while the instructor provided additional support to the partnered groups. For lessons six and seven, students were given previously written essays and asked to edit them independently while the teacher answered questions and provided feedback to the students individually. Students also participated in a quiz during lesson seven, in which they were asked to write the eight revision steps and SCAN in order from memory. Any student who was absent during this instructional period received additional support and instruction upon returning to school.

After the instruction was completed, students were given the persuasive essays they had written pre-instruction. They were then instructed to use the eight revision steps and SCAN to revise their essays to make them even stronger. They were informed that this would again be an independent project, and that the instructor would not provide assistance. Students were given two, 43-minute periods in which to revise their original essays, make the changes in their computer files, and print out final copies.

After the class had completed final copies of their essays, they received copies of the Evaluation Rubric. The instructor reviewed the scoring categories and asked students to evaluate their own essays. Students were reminded that their self-evaluation scores would not impact their grades for this project.
Materials

The students composed their essays using classroom computers equipped with standard word-processing software. The evaluations and student self-evaluations were completed using the Evaluation Rubric found in Appendix A. Lesson plans and reproducible masters were found in the book *Powerful Writing Strategies for All Students* by Harris, et al. (2008), except for the modified Steps for Revision Checklist, which can be found in Appendix C. Students also were provided with highlighters, pencils when needed, and folders for keeping their materials within the classroom.

Data Collection Plan

The pre-intervention research paper and essay evaluation scores were examined in order to determine writing baselines for each student. Post-intervention research paper and essay evaluation scores were then collected so they could be compared to their respective pre-intervention scores in order to answer the question, “What effect does SRSD have on the writing of seventh-grade students with special education needs?” Two pre-intervention, and two post-intervention essays were written and scored in order to provide broader baseline and post-intervention data, and to mitigate the possibility that any one essay may prove to be an outlier (either very low-scoring or very high-scoring) skewing the results. By collecting two sets of pre-, and post-intervention data, the researcher was able to examine individual essay scores, as well as mean scores of each student’s pre-intervention and post-intervention essays. Additionally, the researcher collected self-evaluations from each student in order to triangulate the data derived from the researcher’s own evaluations. This measure was taken to minimize the Halo Effect.
Determining the Results

The data collection instrument used was the Evaluation Rubric, a rubric that assigns a numerical value to elements of the student’s writing, such as: “Well organized;” “Ideas are clear and well illustrated;” and “Includes many different kinds of sentences.” Each element was scored using the following scale: 5-excellent; 4-very good; 3-OK; 2-still needs some work; 1-needs more work. Students completed the self-evaluation forms and handed in their final copies with rough drafts and self-evaluations attached. The researcher completed Evaluation Rubrics for each student’s final research paper and essay without reading the students’ self-evaluations.

In order to determine whether instruction in SRSD would be valuable in improving students’ writing, the instructor’s pre-intervention scores and the students’ self-evaluations were compared to the post-intervention scores. First, students’ self-evaluation pre-intervention and post-intervention scores and the percent of change were analyzed for the research papers and persuasive essays separately. Then, the instructor’s pre-intervention and post-intervention evaluation scores and the percent change were analyzed for the research papers and persuasive essays. The total pre-, and post-intervention scores and percent change in students’ self-evaluations were compared to the instructor’s evaluations for both writing samples combined. Bar graphs were used to illustrate the instructor’s scores and each student’s scores separately.
Chapter 4

Research Question

Would teaching the methods of SRSD to seventh-grade students with exceptional education needs be valuable in improving the clarity and quality of their writing? This question guided the research discussed here.

Supporting Data

In the pre-intervention research paper, the students’ self-evaluation mean score was 65 out of 70 possible points (SD=4.12) (Figure 1) versus the instructor’s mean score of 44 out of 70 points (SD=6.65) (Figure 2). The students’ self-evaluations of their post-intervention research papers had a mean raw score of 63 out of 70 points (SD=7.44), for a 2% decrease in the mean score. By contrast, the instructor’s mean of the post-intervention research papers was a score of 51 (SD=6.95); a 16% increase in the mean score.

Figure 1. Student self-evaluation pre-, and post-intervention scores (out of 70 possible points) on the research paper with percent change for each student.
Figure 2. Instructor pre-, and post-intervention scores (out of 70 possible points) on the research paper with percent change for each student.

In the pre-intervention persuasive essay, students’ self-evaluation mean score was 59 (SD=8.81) (Figure 3), versus the instructor’s mean score of 44 out of 70 possible points (SD=10.97) (Figure 4). The students’ self-evaluations of their post-intervention persuasive essays showed a mean score of 66 out of 70 possible points (SD=4.03), which signals a mean increase in students’ self-evaluation scores of 14%. The instructor’s mean post-intervention persuasive essay mean score was 49 (SD=12.15), which indicates a mean increase of 13%.
Figure 3. Student self-evaluation pre-, and post-intervention scores (out of 70 possible points) on the persuasive essay with percent change for each student.

![Student Self-Evaluation Scores on Persuasive Essay](image)

Figure 4. Instructor evaluation pre-, and post-intervention scores (out of 70 possible points) on the persuasive essay with percent change for each student.

![Instructor Evaluation Scores on Persuasive Essay](image)
Three students’ (12269, 64960, and 82258) self-evaluation scores showed the greatest percent improvement on the persuasive essay. The instructor’s evaluations indicated two students’ (64960 and 82258) scores showed the greatest percent improvement on the persuasive essay; the other two students (12269 and 50345) showed the greatest percent improvement on the research paper.

Pre-, and post-intervention self-evaluation scores and combined percent change were totaled for each student. These scores were compared to the instructor’s pre-, and post-intervention scores and combined percent change for each student (Figure 5). The combined percent change in students’ self-evaluations ranged from -4% (Student 64960) to +11% (Student 82258). By contrast, the combined percent change in the instructor’s scores ranged from 7% (Student 64960) to 19% (Student 12269).
Figure 5. Student self-evaluation pre-, and post-intervention scores (out of 140 total possible points) on the research paper with percent change in evaluators’ scores for each student.

In respect to answering the research question, the findings seem to indicate that teaching the methods of SRSD to seventh-grade students with exceptional education needs was valuable in improving the clarity and quality of their writing. All students experienced an increase in their post-intervention self-evaluation scores of at least one of the papers; the instructor’s scores showed some increase in each student’s post-intervention scores for both papers.

For the research paper, two students scored their post-intervention papers lower than their pre-intervention papers. Of the 70 possible points, those students’ scores decreased from 59 to 53 and from 69 to 62. The other two students’ self-evaluation scores increased from pre-intervention to post-intervention, rising from 65 to 67 and 65 to 70. The students’ self-evaluations averaged a
score of 65 for the pre-intervention paper and 63 for the post-intervention paper, for a decrease on average of 2% from pre-intervention to post-intervention. By contrast, the instructor’s scores for each student’s post-intervention research paper increased from pre-intervention to post-intervention (from 37 to 50; 52 to 59; 40 to 42; and 46 to 51). The instructor’s pre-intervention scores averaged 44, and the post-intervention evaluation scores averaged 51. The instructor’s post-intervention evaluation scores were, on average, 16% greater than the pre-intervention scores.

There was a great difference between the students’ self-evaluation scores and the instructor’s evaluation scores. The students’ pre-intervention self-evaluation scores averaged 65; the instructor’s averaged 44. The students’ post-intervention self-evaluation scores averaged 63; the instructor’s averaged 51. The great disparity between the students’ and instructor’s scores appears to confirm the students’ challenges with metacognition, identifying proper mechanics, and discerning strong writing from that which is unclear. It also may be due to bias on the part of the instructor.

For the persuasive essay, all four students scored their post-intervention papers higher than their pre-intervention papers. Of the 70 possible points, students’ scores increased from 63 to 69; 66 to 68; 59 to 60; and from 46 to 66. The students’ self-evaluation scores averaged a raw score of 59 for the pre-intervention paper and 66 for the post-intervention essay, for an increase on average of 14% from pre-intervention to post-intervention. The instructor’s scores for each student’s post-intervention research paper also increased from the pre-intervention to post-intervention (from 59 to 64; 38 to 42; 34 to 37; and 43 to 54). The instructor’s pre-intervention scores averaged 44, and the post-intervention evaluation scores averaged 49. The instructor’s post-intervention evaluation scores were, on average, 13% greater than the pre-intervention scores.
scores. The instructor found students’ scores increased across all categories of the Evaluation Checklist.

Again there was a great difference between the students’ self-evaluation scores and the instructor’s evaluation scores. The students’ pre-intervention self-evaluation scores averaged 59; the instructor’s averaged 44. The students’ post-intervention self-evaluation scores averaged 66; the instructor’s averaged 49. The great disparity between the students’ and instructor’s scores appears to confirm the students’ challenges with metacognition, identifying proper mechanics, and discerning strong writing from that which is unclear. It also may be due to bias on the part of the instructor. Still, the average percent of change of the students’ self-evaluations (16% increase) was similar to the average percent of change of the instructor’s evaluations (13% increase).

The significance of the findings is that this group of seventh-grade students with exceptional education needs appeared to benefit from SRSD instruction. This may indicate that other groups of middle-school students with SLD or ADHD may also benefit from similar instruction.
Chapter 5

Restatement of Purpose of the Study

The purpose of this study was to determine the effect of Self-Regulated Strategy Development (SRSD) on the writing of students with exceptional education needs. By determining the effectiveness of this instruction, the researcher and other educators would be able to better predict the impact this method might have on current and future students, and to determine whether this method warranted the use of valuable class time.

Previous studies have shown improvement with students’ writing after instruction in SRSD as described in Chapter 2. Past studies have typically had small sample sizes like this one; however, most have studied students who are younger or older than the participants in this study. Furthermore, few studies have been conducted with students who have SLD; most have concentrated on students with EBD or ADHD. This research built upon past studies and looked at effects on this population.

Summary of Findings

The results appear to indicate that teaching the SRSD strategy to seventh-grade students with exceptional educational needs proved beneficial to the students’ writing. It is important to note that all students’ scores increased from the pre-intervention to the post-intervention instructor evaluations on both papers; on the student self-evaluations, two of the four students reported an increase in scores from the pre-intervention to the post-intervention on the research paper and all four students reported an increase in scores from the pre-, to the post-intervention on their research papers. When the scores of both papers were added together, students’ self-evaluation scores increased an average of 5% from the pre-intervention to post-intervention papers, and the instructor’s evaluation scores increased an average of 14%. Because of these
reported increases, it appears that SRSD instruction improved the quality and clarity of students’ writing.

While researcher bias must be examined as a possible explanation for the increase in student scores, the increase in the students’ overall self-evaluation scores helps to triangulate the data, minimizing the effect of this potential bias. Another possible explanation for the increase cold be due to the natural maturation of the students. Although this could be a factor, the very condensed time period for the research (only nine weeks total) helps to minimize the effect of normal student growth over time.

The implications of the data for the researcher’s educational practice are that the researcher will continue to use the SRSD method with future students, and will expand the number and type of strategies taught in one academic year to include SRSD strategies for other types of writing and revising. In regard to educational theory, these data seem to show that a direct method of teaching writing strategies to seventh-grade students with exceptional education needs is preferable to more “natural” methods in which students are expected to glean such information by example rather than through direct instruction.

The researcher recommends that other instructors of seventh-grade students with exceptional education needs teach the SRSD method of writing to their students, as the data seem to indicate that it may improve the clarity and quality of students’ writing. Additionally, the researcher recommends future study with broader and more diverse populations in order to increase the generalizability of the results; the results of this study do not have broad generalizability because of the small, mostly homogenous sample.
The small sample size was one of the limitations of this study. Another limitation was the potential effect of researcher bias on the data; this could be minimized in the future by inviting other third-party instructors to score of their own, and to compare the scores.

One of the strengths of this study was the inclusion of the students’ self-evaluations. This process provided an alternate reference point for comparing scores. Additionally, the ability to compare scores of two different writing genres may help to generalize the data of this population across other writing as well.

In the future, more research needs to be conducted on the retention of these strategies over time. If this study were to be changed or expanded in the future, it should include: a greater and more heterogeneous sample; other third-party evaluators to further triangulate the data; and evaluation of students’ writing over time to study the retention of these strategies by students and their ability to implement them independently throughout their academic careers.
References


Graham, S. & Harris, K. (1997) It can be taught, but it does not develop naturally; Myths and realities in writing instruction. *School Psychology Review, 26*, 414-424.


APPENDIX A

Evaluation Checklist

Name: ________________________________________________________________

Date: ________________________________________________________________

Title: ________________________________________________________________

Type of Writing: _______________________________________________________

Circle the appropriate score for each item:
5 is excellent
4 is very good
3 is OK
2 still needs some work
1 needs more work

Ideas and Development
5 4 3 2 1 Fully addresses the topic (answers all parts of the prompt)
5 4 3 2 1 Good development of ideas with many details elaborated and extended
5 4 3 2 1 Presents details/examples in a way that helps the reader understand the topic
5 4 3 2 1 Ideas are clear and well illustrated

Organization, Unity, and Coherence
5 4 3 2 1 Topic is clearly identified
5 4 3 2 1 Remains on topic
5 4 3 2 1 Well organized, with a smooth flow from one idea to the next
5 4 3 2 1 Clear introduction, body paragraphs, and conclusion
5 4 3 2 1 Uses transitions skillfully to link sentences or paragraphs together

Vocabulary
5 4 3 2 1 Good word choices that are appropriate, specific, and varied
5 4 3 2 1 Uses synonyms appropriately
5 4 3 2 1 The essay is fun to read or tells the reader something about the writer’s personality

Sentence Structure, Grammar, and Usage
5 4 3 2 1 Includes many different kinds of sentences (various lengths and structures)
5 4 3 2 1 Has few (or no) errors in grammar or word usage and is easy to read

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Think Before Reading

Think about:
- The Author’s Purpose
- What You Know
- What You Want to Learn

Think While Reading

Think about:
- Reading Speed
- Linking Knowledge
- Re-reading Parts

Think After Reading

Think about:
- The Main Idea
- Summarizing Information
- What You Learned

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Eight Steps for Revising Checklist

<table>
<thead>
<tr>
<th>Steps</th>
<th>Attempts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Read your essay.</td>
<td></td>
</tr>
<tr>
<td>2. Find the sentence that tells what you believe. Is it clear?</td>
<td></td>
</tr>
<tr>
<td>3. Add three reasons why you believe it.</td>
<td></td>
</tr>
<tr>
<td>4. Tell one reason why someone else might disagree with you.</td>
<td></td>
</tr>
<tr>
<td>5. Explain why that disagreement doesn't make as much sense as your belief.</td>
<td></td>
</tr>
<tr>
<td>6. SCAN each sentence.</td>
<td></td>
</tr>
<tr>
<td>7. Make changes.</td>
<td></td>
</tr>
<tr>
<td>8. Read your essay and make final changes.</td>
<td></td>
</tr>
</tbody>
</table>

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