LESSONS LEARNED: AN ACTION RESEARCH PROJECT IN SELF-REGULATED STRATEGY DEVELOPMENT WRITING INSTRUCTION FOR SECONDARY STUDENTS WITH EMOTIONAL AND BEHAVIORAL DISORDERS

Mandy E. Lusk
Clayton State University
Calli Lewis Chiu
California State University, Fullerton
Donna Sayman
Wichita State University

Abstract: Secondary students with emotional and behavioral disorders (EBD) often struggle in various academic areas, specifically in written expression. Researchers have found that when culturally diverse learners with EBD learn effective writing strategies, students can effectively express themselves. Self-regulated strategy development (SRSD) is a systematic instructional model designed to address many difficulties associated with writing, including motivation, attitudes, and beliefs about the writing process (Harris, Graham, Friedlander, & Laud, 2013). The present study investigated the effect of an SRSD intervention on the persuasive writing skills of culturally diverse secondary students with EBD. Results of the study support that the SRSD intervention contributed to varied increases in total words written and in essay quality. The researchers encountered many challenges during the action research project. This manuscript documents the challenges and reflects on possible solutions for the readers to consider when engaging in action research.

Keywords: action research, SRSD, emotional and behavioral disorders, secondary, special education, writing

Introduction
Students with emotional and behavioral disorders (EBD) often struggle in various academic areas (Ennis, Jolivette, & Boden, 2013; Graham & Perin, 2007; Mason, Kubina, Kostewicz, Cramer, & Datchuk, 2013). These students often have average intelligence; however, their internalizing and externalizing challenging behaviors prohibit them from being successful in academic skills including written expression (Losinski, Cuenca-Carlino, Zablocki, & Teagarden, 2014). The Individuals with Disabilities Improvement Act (IDEIA; 2004) uses the term *emotional disturbance*, also known as EBD, and defines it as:

A condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child’s educational performance:

- (a) An inability to learn that cannot be explained by intellectual, sensory, or health factors.
- (b) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
- (c) Inappropriate types of behavior or feelings under normal circumstances.
- (d) A general pervasive mood of unhappiness or depression.
- (e) A tendency to develop physical symptoms or fears associated with personal or school problems (§300.8(c)(4)(i)).

Emotional disturbance includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance (§300.8(c)(4)(iii)).

Specifically related to writing, students with EBD often lack knowledge of strategic elements needed to produce a cohesive, quality writing sample (Losinski et al., 2014). Researchers have found that when students with EBD learn effective writing strategies, they can effectively express themselves and, consequently, receive favorable feedback from their peers, families, educational professionals, and other individuals in their communities (Tindal & Crawford, 2002).

**Literature Review**

*Action research to improve teaching practice.* This present study was initiated when the director of an educational program for students with EBD approached the first author, who also serves as research partner with this educational program, regarding research-based writing interventions specifically designed for students with challenging behaviors. He expressed a dire need for writing interventions among this student population. The director stated that the students with EBD within this educational program often failed the writing section of their state assessments. Knowing that self-regulated strategy development (SRSD) is a research-based strategy for teaching writing to students with challenging behaviors (Ennis & Jolivette, 2014; Lane, Harris, Graham, Weisenbach, Brindle, & Morphy, 2008; Mason, Snyder, Sukhram, & Kedam, 2006), the authors decided to conduct an action research project using SRSD. Through engaging in action research, the authors hoped to
bridge the ubiquitous “research to practice gap”. Teachers often cite concerns that educational research is not adequate to meet the daily challenges of teaching and that research findings are not presented in terms that are easy to understand (Mills, 2014). The researchers developed a plan for an action research project designed to improve students’ abilities to write persuasive essays. The purpose of this article is twofold. The authors present information about the writing intervention and the results of the intervention. The researchers also discuss challenges and lessons learned throughout the action research process in the Results and Future Directions sections.

**Self-regulated strategy development.** Developed in 1982, SRSD is a systematic instructional model designed to address many difficulties associated with writing, including motivation, attitudes, and beliefs about the writing process (Ennis & Jolivette, 2014). The model incorporates techniques for setting goals, self-monitoring, self-instruction, and self-reinforcement. When taught to mastery, the strategies may be generalized across settings and retained over time (Harris, Graham, Mason, & Friedlander, 2008).

SRSD is comprised of six stages: (a) develop background knowledge, (b) discuss it, (c) model it, (d) memorize it, (e) support it, and (f) independent performance (Harris et al., 2013). During the first stage, **develop background knowledge**, the teacher and students work together to develop skills related to writing instruction (Ennis & Jolivette, 2014). Activities for this stage include reading writing samples of the genre to be taught (e.g., persuasive, narrative, expository) and teaching relevant vocabulary. Students also learn about setting goals and self-monitoring. During stage two, **discuss it**, the teacher and students discuss the importance of writing and the students learn the importance of using strategies when they write. Students may evaluate their current writing performance using rubrics and graphs. Lastly, the students are introduced to a strategy, often a mnemonic, to help guide their writing. Stage three, **model it**, involves the teacher modeling the use of the strategy; explicit instruction is provided regarding how to use the strategy. Additionally, students are taught how to use self-talk as they move through the writing process. In the fourth stage, **memorize it**, students memorize the strategy they learned during the **discuss it** stage. During this stage, the students are taught strategies to help them internalize the importance of the strategy. In stage five, **support it**, teachers monitor students’ use of the strategies in their writing. **Support it** is typically the longest stage, and teachers should provide ample amounts of support and reminders so that students are successful in utilizing the strategy. A gradual increase of individual criterion levels should be incorporated in this stage, and opportunities for generalization should be provided. During the final stage, **independent performance**, students implement the strategy independently and self-regulate their own writing. Opportunities for generalization of the skills learned should continue to be provided (Harris et al., 2013).

**SRSD and secondary students.** Chalk, Hagan-Burke, and Burke (2005) used a six-step SRSD model among high school students with learning disabilities to determine if length and quality of essays would improve. The steps of the intervention were as follows (a) step one:
develop background knowledge, (b) step two: initial conference and discussion of strategy goals, (c) step three: model the strategy, (d) step four: memorize the strategy, (e) step five: collaborative practice, and (f) step six: independent practice. Results of the study indicated that both length of essays and quality of essays improved over time.

Another study examining SRSD among high school students with learning disabilities produced similar results. A study by Hoover, Kubina, and Mason (2012) utilized the SRSD strategy known as POW+TREE (Pick my idea, Organize my notes, Write and say more, Topic sentence, Reasons – three or more, Examine, Ending) to teach persuasive quick writes. Four high school students with learning disabilities participated in the research and results demonstrated increases in the number of words written and in the number of response parts written.

**SRSD and youth with EBD.** SRSD is shown to be effective in teaching writing to students with challenging behaviors (Ennis & Jolivette, 2014; Mason et al., 2006; Lane et al., 2008). A study found significant gains in the persuasive writing of secondary students with EBD when an SRSD intervention was implemented twice per week (Ennis, Jolivette, Terry, Frederick, & Alberto, 2015). Additionally, a SRSD intervention used to teach story writing to second grade students at risk for EBD was found to produce long-term improvements in areas including story completeness, length, and quality (Lane et al., 2008). Additionally, SRSD instruction has been found to positively impact participants’ ability to transfer the strategies from story writing to personal narratives (Adkins & Gavins, 2012). With empirical studies supporting SRSD as an effective intervention for both secondary students with disabilities and students with EBD, the researchers felt confident moving forward with an SRSD intervention for the purposes of this action research project.

**Methodology**

**Research questions.** For the purpose the current study, the authors chose to focus on two primary areas of concern in written expression: fluency and quality. The research questions are as follows:

1. When culturally diverse secondary students with EBD are taught how to write a persuasive essay using SRSD in English Language Arts (ELA), does the total words written (TWW) increase?
2. When culturally diverse secondary students with EBD are taught how to write a persuasive essay using SRSD in ELA, does essay quality improve?

**Setting and participants.** The study was conducted in two high school classes and one middle school class in schools for students with EBD in the southeastern United States. There were approximately five to eight students per classroom. To be eligible for the study,
participants had to demonstrate difficulty with written expression and score in the average range of intelligence. Eligibility criteria were determined for 12 participants, and informed consent and assent were obtained. The participants ranged grade levels from 6th grade through 11th grade. All participants identified themselves as African American, and all participants were of low socio-economic status (i.e., they were eligible to receive free lunch). Thirteen of the fourteen participants were male. Pseudonyms are used in lieu of the participants’ true names. Participant information is presented in Table 1.

**Table 1: Participant Information**

<table>
<thead>
<tr>
<th>Participants’ Pseudonyms</th>
<th>Gender</th>
<th>Race</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Oak’s Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Devon</td>
<td>Male</td>
<td>African American</td>
<td>10th</td>
</tr>
<tr>
<td>Jasmine</td>
<td>Female</td>
<td>African American</td>
<td>10th</td>
</tr>
<tr>
<td>Trevor</td>
<td>Male</td>
<td>African American</td>
<td>10th</td>
</tr>
<tr>
<td>Ms. Christopher’s Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casey</td>
<td>Male</td>
<td>African American</td>
<td>7th</td>
</tr>
<tr>
<td>Paul</td>
<td>Male</td>
<td>African American</td>
<td>7th</td>
</tr>
<tr>
<td>Justin</td>
<td>Male</td>
<td>African American</td>
<td>7th</td>
</tr>
<tr>
<td>Deandre</td>
<td>Male</td>
<td>African American</td>
<td>7th</td>
</tr>
<tr>
<td>Jermaine</td>
<td>Male</td>
<td>African American</td>
<td>7th</td>
</tr>
<tr>
<td>Steven</td>
<td>Male</td>
<td>African American</td>
<td>7th</td>
</tr>
<tr>
<td>Ms. Gaines’s Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calvin</td>
<td>Male</td>
<td>African American</td>
<td>11th</td>
</tr>
<tr>
<td>Chris</td>
<td>Male</td>
<td>African American</td>
<td>10th</td>
</tr>
<tr>
<td>Allen</td>
<td>Male</td>
<td>African American</td>
<td>11th</td>
</tr>
</tbody>
</table>

The director recruited three English Language Arts (ELA) teacher participants for the study. The teacher participants exhibited varied levels of teaching experiences (e.g., beginning special education teachers, teachers of students from various disability categories, teachers of students from various age levels). For example, one teacher participant was a former general education literacy teacher. Another teacher participant was a third-year teacher of students with EBD with limited knowledge of teaching writing strategies to students with
disabilities. Teacher participants gave consent to participate in the study and, as with the student participants, pseudonyms are used for the participating teachers.

**Intervention.** The ELA teacher participants received training comprised of six scripted SRSD lesson plans to be presented over six weeks. The researchers informed the teachers of the data that would be collected, and teachers were given specific instructions about their involvement regarding data collection. The researchers gave the teachers binders with all materials needed for the intervention: (a) teacher training presentation; (b) SRSD intervention timeline; (c) lesson plans; (d) SRSD resources including graphic organizers, rubrics, writing prompts, and transition word charts; (e) TREE flash cards; (f) POW+TREE mnemonic charts, and (g) self-talk statements. Student participants received folders containing POW graphic organizers, mnemonic charts, self-talk statements, TREE flash cards, and graphing sheets. After baseline data collection, the teachers implemented the intervention by teaching one SRSD lesson per week for six consecutive weeks. The researchers sent weekly emails to the teachers with details of the study expectations for the week. The researchers also maintained continuous contact, via email and in person, with the teachers to encourage an open dialogue about the status of the intervention and data collection.

**SRSD and culturally responsive teaching.** Culturally responsive teaching is defined as “using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them” (Gay, 2010, p. 31). Understanding the significance of culturally responsive teaching, the researchers integrated culturally responsive practices throughout the intervention. For example, writing instruction for students from culturally diverse backgrounds should be accompanied by the writings of authors that reflect diversity (Callins, 2006; Fox, 1992; Gay, 2010). Therefore, in the introductory lesson, student participants were asked to brainstorm and discuss examples of individuals from their culture using persuasive speech or writing in social media. The exercise presented student participants with an opportunity to reflect on the writings and speech of individuals from their own backgrounds and culture.

Another tenant of culturally responsive writing instruction supports that allowing students to choose their own topics and demonstrating how writing can be used to affect change can be particularly motivating for students from diverse backgrounds (Callins, 2006; Hornick, 1986). Also, students benefit when teachers integrate students’ social contexts into writing instruction (Callins, 2006). For each writing lesson in the intervention, participants were supported in generating topics for writing that were of personal significance. This was accomplished as teachers assisted the participants in brainstorming current events about which they were interested. Doing so ensured that the subject matter of the writing resonated authentically with participants. Lastly, culturally responsive classrooms encourage cooperative learning to support individual learning within a group context (Cartledge &
Kourea, 2008; Ladson-Billings, 1994). Therefore, a lesson for the intervention was developed in which students worked in small groups to compose an essay. The activity allowed the students to practice writing in a group setting before writing an essay independently.

**Data collection and data analysis.** Baseline and intervention data consisted of participants’ scores on persuasive writing probes. For each probe, the researchers encouraged the teacher participants to work with the student participants in developing culturally relevant prompts. Researchers also gave the teacher participants the option of using a previously generated prompt (e.g., Should the driving age be increased to 21 years old?). For each writing prompt, participants had 30 minutes to respond in writing to the prompt. Each writing probe required participants to compose a position on a topic and write reasons supporting their position. The researchers evaluated the probes using two measured: essay quality and length of writing response indicated by TWW. Essay quality was determined using a rubric ranging in scores from one to eight (Appendix A; Mills, 2012). The rubric encompassed aspects of writing including (a) number of essay components per writing sample, (b) presence of introduction sentences, (c) presence of concluding sentences, and (d) whether explanations were provided for the reasons. The highest score of eight included the following criteria,

- “Persuasive essay includes topic sentence, more than three reasons with at least three explanations, and an ending sentence. Essay is written in a logical sequence that strengthens the writer’s argument. The writer uses more than one counter argument/point in the essay.”
- A lower score of five was assigned to persuasive essays that included a topic sentence, three reasons supporting the argument, and an ending sentence, but was lacking other elements listed in the criteria for a score of eight. Each researcher scored each probe individually. In instances where a discrepancy between scores was evidenced, the essay was assigned an average score of the two.

**Inter-rater reliability.** Prior to scoring participant essays, the researchers independently scored two sample essays using the coding rubric (Mills, 2012). Then the researchers met to compare how they scored each of the essays and discrepancies were discussed. A third sample essay was scored by each of the researchers, and full inter-rater agreement was achieved.

**Results and Discussion**

The researchers anticipated and experienced high rates of missing data in the present study based on the category of disability of the participants. Students with EBD often demonstrate high rates of absenteeism due to living in situations where multiple risk factors are present including multiple children with disabilities and maternal depression (Ennis, Harris, Lane, & Mason, 2014). Additionally, because of the severity of their disability, students who
demonstrate significant challenging behaviors are frequently suspended and expelled from school settings. The elevated rates of missing data in the present study had multiple repercussions for the researchers. First, the intervention may have had marginal efficacy for participants who were not present for each lesson of the intervention. The second consequence of the missing data relates to the data analysis. Of the nine writing probes, or data collection points, only two of the 12 participants were present on each day of data collection. The researchers engaged in dialogue regarding how to navigate the issue of missing data in future projects. As the current study was nine weeks long, with data collected once per week, the researchers discussed the possibility of developing interventions designed to be implemented over a shorter period, with data collection occurring multiple times per week.

The goals of the SRSD intervention were to improve students’ essay quality and increase students’ TWW. Results suggest that there were increases in the students’ TWW for the participants who received intervention, but very little increase in the quality of the essays. Ms. Gaines did not implement the SRSD intervention. Even though her students did not receive the intervention, two of three students showed some improvement in essay quality. For TWW, the participants’ averages decreased over time. Calvin began with an average of 34 TWW and ended with an average of 32.75 TWW, a difference of -1.25 words. Chris began with an average of 139 TWW and ended with an average of 82.75 TWW, a difference of -56.25 words. Allen started with an average of 307 TWW and ended with an average of 50.50 words, a difference of -256.50 words.

Ms. Oak and Ms. Christopher implemented the intervention. In these classes, many participants demonstrated increases in essay quality and TWW. In Ms. Oak’s class, Trevor was the only participant who showed an increase from baseline data to intervention data regarding essay quality. Devon demonstrated a decrease in essay quality over time. Jasmine’s baseline data was a zero and intervention data was a two. In Ms. Christopher’s class, Paul and Justin were the only two students to show an increase from the baseline data and intervention data for essay quality. Jermaine and Steven did not have a baseline data and they had missing data. The missing data made it difficult to determine if the intervention helped them increase essay quality. Casey did not show an increase from the baseline data to the intervention data.

The intervention appears to have been more effective in increasing in TWW. In Ms. Oak’s class, Jasmine’s baseline data was an average of 0.33 TWW and increased by 42.17 words after receiving the intervention. Trevor’s TWW increased by an average of 29.53 words from his baseline data. Devon demonstrated a decrease in TWW. In Ms. Christopher’s class, Paul increased his TWW by an average of 50 words, Justin increased his TWW by an average of 148 words, and Deandre increased his TWW written by an average of 95 words. Casey showed a decrease of 16.67 TWW. Progress regarding Jermaine and Steven’s TWW was
difficult to determine due to a large amount of missing data. Changes over time in participants’ essay quality scores and TWW are graphed in Figures 1 through 6, and numerical data detailing the changes are presented in Tables 2 and 3.

Figure 1. Essay Scores for Participants in Ms. Oak’s High School Classroom

Figure 2. Total Words Written for Participants in Ms. Oak’s High School Classroom
Figure 3. Essay Scores for Participants in Ms. Christopher’s Middle School Classroom

Figure 4. Total Words Written for Participants in Ms. Christopher’s Middle School Classroom
Figure 5. Essay Scores for Participants in Ms. Gaines’s High School Classroom

Note. Ms. Gaines did not implement the SRSD intervention; therefore, the participants’ essay scores in her classroom function as the control group.
Figure 6. Total Words Written for Participants in Ms. Gaines’s High School Classroom

Note. Ms. Gaines did not implement the SRSD intervention; therefore, the participants’ total words written for her classroom function as the control group.

In Ms. Oak’s class, Trevor demonstrated the greatest gain regarding essay quality. During baseline data collection, Trevor averaged 1.67 and after the intervention, he averaged 3.80 in essay quality. Ms. Oak reported that Trevor enjoyed the SRSD lessons and stated he felt successful with his writing for the first time in his school career. Ms. Oak motivated Trevor with verbal praise and tangible reinforcements also called positive behavior interventions and support when he completed his writing prompts. Trevor’s TWW also increased from pre-intervention to post intervention, from an average of 94.67 words written to an average of 124.20 words.

In addition to promoting academic success, practitioners are using positive behavior interventions and supports (PBIS) as a framework to encourage behavioral success of students in schools. PBIS is useful for educators seeking prevention and intervention strategies for students’ problematic behaviors (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008). Furthermore, it is based on a problem-solving model preventing inappropriate behavior through teaching and reinforcing appropriate conduct (Office of Special Education Programs Technical Assistance Center on PBIS, 2012). PBIS emphasizes educating at-risk students in the least restrictive environment utilizing appropriate educational supports (Lewis, Jones, Horner, & Sugai, 2010).

As evidenced in Tables 2 and 3, Jasmine demonstrated the most positive gains from the intervention. This may have been the result of actions taken by her teacher participant, Ms.
Oak, who took an unconventional approach to Jasmine’s emotional issues and her academic work. Jasmine demonstrated writing skills approximately four grade levels below her actual grade level. In addition to the significant academic deficit, significant trauma that Jasmine experienced several years prior resulted in Jasmine exhibiting selective mutism. However, Jasmine would often speak if the subject matter was related to classwork. Because of her limited writing skills, Jasmine struggled with the SRSD lessons. Ms. Oak sought ways to accommodate the lessons for Jasmine, and found that when Jasmine dictated her SRSD responses, instead of writing her own responses, Jasmine’s anxiety seemed to lessen and her productivity increased. The researchers met and discussed this unconventional situation. Although the goal of the intervention was for students to construct essays independently, the researchers felt it was necessary to report the progress Jasmine had made and disclose to the reader that Ms. Oak transcribed Jasmine’s responses.

Table 2: Averages for Essay Quality and Amount Changed

<table>
<thead>
<tr>
<th>Participants</th>
<th>Average Essay Quality</th>
<th>Pre-Intervention (Probes 1-3)</th>
<th>Post Intervention (Probes 4-9)</th>
<th>Difference (After - Before)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Oak’s Class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Devon</td>
<td>1.67</td>
<td>1.33</td>
<td>-0.33</td>
<td></td>
</tr>
<tr>
<td>Jasmine</td>
<td>0.00</td>
<td>2.00</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td>Trevor</td>
<td>1.67</td>
<td>3.80</td>
<td>2.13</td>
<td></td>
</tr>
<tr>
<td>Ms. Christopher’s Class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paul</td>
<td>2.33</td>
<td>3.00</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>Justin</td>
<td>3.67</td>
<td>4.67</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Deandre</td>
<td>4.67</td>
<td>4.50</td>
<td>-0.17</td>
<td></td>
</tr>
<tr>
<td>Jermaine</td>
<td>N/A</td>
<td>4.00</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Steven</td>
<td>N/A</td>
<td>2.00</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
Ms. Gaines’s Class

<table>
<thead>
<tr>
<th>Participants</th>
<th>Average Total Words Written</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calvin</td>
<td>1.00 2.00 1.00</td>
</tr>
<tr>
<td>Chris</td>
<td>3.67 4.00 0.33</td>
</tr>
<tr>
<td>Allen</td>
<td>7.00 1.50 -5.50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3: Averages for Total Words Written and Amount Changed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>Ms. Oak’s Class</td>
</tr>
<tr>
<td>Devon</td>
</tr>
<tr>
<td>Jasmine</td>
</tr>
<tr>
<td>Trevor</td>
</tr>
<tr>
<td>Ms. Christopher’s Class</td>
</tr>
<tr>
<td>Casey</td>
</tr>
<tr>
<td>Paul</td>
</tr>
<tr>
<td>Justin</td>
</tr>
<tr>
<td>Deandre</td>
</tr>
<tr>
<td>Jermaine</td>
</tr>
<tr>
<td>Steven</td>
</tr>
</tbody>
</table>
Ms. Gaines’s Class

Calvin  34.00  32.75  -1.25
Chris   139.00 82.75  -56.25
Allen  307.00  50.50  -256.50

Note. Ms. Gaines did not implement the SRSD intervention; therefore, the participants’ essay scores in her classroom function as the control group.

Difficulties Related to the Study

**Difficulties in implementation of SRSD after a pilot study.** Upon analyzing data from the current study and finding erratic scores and marginal effectiveness of the intervention, the researchers engaged in dialogue to generate ideas about how the intervention might be improved upon. Approximately one year earlier, the authors had conducted a pilot study of the SRSD intervention among secondary students with EBD at a different site. The researchers agreed that a tremendous amount had been learned from the preliminary study. Likewise, the researchers concurred that a significant amount of troubleshooting had been resolved since the preliminary study and that the present study had been carried out in a much more efficient manner. For example, the researchers implemented lessons with greater fidelity than had taken place in the preliminary study and the data collection procedures had been improved upon. The researchers were surprised that despite improvements made to fidelity and data collection procedures, data analysis of the current study showed inconsistent effects in persuasive writing quality and TWW for the participants.

**Difficulties related to specific lessons and implementation of SRSD.** The researchers continued participating in dialogue regarding the possible reasons for the lack of efficacy of the intervention. The researchers reviewed the writing samples again. The researchers, who all have experience teaching written expression to children and youth with a variety of disabilities, determined that a plausible reason for the ineffectiveness of the intervention is that it simply was not a “good fit” based on the participants’ current written expression skills. For example, many participants demonstrated significant difficulty writing a complete sentence, yet the goal of the intervention was for participants to use mnemonics to produce entire persuasive essays. The researchers contemplated their previous experiences teaching writing to students with EBD, and concluded that, perhaps the intervention goals exceeded the participants’ current abilities. It was discussed that many of the participants would likely have benefitted more from explicit instruction in basic writing skills (e.g. sentence structure,
grammatics, punctuation), than from an intervention that aimed to teach participants how to draft essays. The investigators learned a valuable lesson in intervention research: ensure that the intervention matches the participants’ ability levels. First assessing the abilities of the participants, and then selecting an intervention for empirical study can accomplish this.

**Difficulties related to teacher participants and implementation of SRSD.** Another set of challenges involved a teacher participant. Ms. Gaines originally agreed to participate in the study by implementing the intervention. However, during the week of the fourth SRSD lesson, she informed the researchers that she no longer wished to participate. Ms. Gaines stated that her students’ behaviors were too unpredictable for her to follow through with weekly lessons. Ms. Gaines later told the researchers that she only gave her students the independent writing prompts, and that she had not taught any of the SRSD lessons. The researchers learned from this situation that relationships with partners in action research can be tenuous, and that great care should be taken in supporting the partners.

**Difficulties related to data collection and implementation of SRSD.** The lead author conducted weekly fidelity checks throughout the course of the intervention. Data collection began the first week of October of the fall semester. Three weeks of baseline data were collected, followed by six weeks of SRSD intervention data. Due to the academic school year schedule, the SRSD intervention was implemented as the winter holiday season approached. Research has shown that students’ inappropriate behaviors often escalate before and during the winter holiday season (Lastrapes, 2014); therefore, it was no surprise that the teacher participants reported that their students’ behaviors were unusually challenging during the mid-November and December months. In fact, the lead researcher observed five physical altercations at one high school on the Friday before the Thanksgiving holidays. All three of the classroom teachers chose not to work on the SRSD intervention the week before the Thanksgiving holiday based on their students’ challenging behaviors. The researchers concluded that careful attention must be given to the scheduling of the intervention. When developing timelines for action research in school settings, researchers should take into account how extraneous factors may impede the performance of not only the student participants, but the teacher participants as well.

**Difficulties related to teaching expectations and implementation of SRSD.** Another challenge encountered by the researchers was the difficulty of ensuring that each lesson was taught with fidelity. The director who recruited the teacher participants for this research study and the teacher participants exhibited varied levels of teaching experiences. For example, one teacher participant was a former general education literacy teacher. Another teacher participant was a third-year teacher of students with EBD, but had limited knowledge of teaching writing strategies to students with disabilities. It was impossible for the researchers to observe and provide feedback for each lesson that each teacher participant taught; however, the researchers collected information on treatment integrity.
for three random lessons during the intervention as well as field notes while visiting the classrooms each week. The lessons may have been delivered with greater fidelity if the research design included a plan for providing the teacher participants with significantly more support in lesson delivery, including modeling and coaching.

**Future Implications**

The inconsistent results of current study should be interpreted in light of several limitations. As previously mentioned, the participants’ attendance and challenging behaviors may have impacted their responsiveness to the intervention. Some students missed class due to consequences of problematic behaviors. The researchers also want to bring attention to the fact that when coding these writing passages, the coding is subjective. The scorers calibrated their coding among each other; however, it is impossible to remove all biases when coding. Furthermore, as mentioned previously, the researchers were unable to observe and provide critical feedback for every writing lesson. However, the researchers collected information on treatment integrity and recorded field notes during data collection.

While the results of this study are promising, additional research in academic interventions for students with EBD is essential. Research in intensive, individualized writing interventions designed for culturally diverse learners with challenging behaviors is warranted. It is also recommended that research continue to replicate and extend the body of literature on SRSD instruction for students with EBD across grade levels. Finally, the researchers encourage more research to be conducted with teachers as intervention agents in classroom settings.
About the Authors

**Mandy E. Lusk, Ph.D.** has been a life-long special educator who currently serves as the program chair and assistant professor at Clayton State University in special education. As a practitioner in special education for numerous years, Dr. Lusk predominantly taught students with emotional and behavioral disorders. In addition, she earned her Ph.D. from the University of North Texas in students with behavior disorders. Dr. Lusk’s research agenda includes preparing teachers to positively educate culturally and linguistically diverse learners with challenging behaviors. Email: mandylusk@clayton.edu

**Calli Lewis Chiu, Ph.D.** is Program Director and Assistant Professor of Special Education at California State University, Bakersfield. Prior to earning her Ph.D., she taught students with moderate to severe disabilities in a variety of settings for 10 years. Her research interests include culturally responsive educational practices and teacher preparation. Email: calliglewis@gmail.com

**Donna M. Sayman, Ph.D.** is an associate professor of special education at Wichita State University. Dr. Sayman completed her Ph.D. at Oklahoma State University. Her research interest focuses on how occupations become gendered, social justice within special education, and teacher preparation for diverse populations. She has collaborated actively with other researchers in the areas of family participation in special education serves, and culturally and linguistically diverse pedagogies. Email: donna.sayman@wichita.edu
References


Appendix A: Scoring Rubric

**Score of 10.** Persuasive essay includes: (a) a topic sentence that is a complete sentence that addresses the topic, (b) more than 3 reasons, (c) at least 3 explanations, (d) more than 1 counter argument/point in the essay, and (e) an ending sentence that is a complete sentence that relates to the writer's position on the topic. Essay is written in a logical sequence that strengthens the writer’s argument.

**Score of 9.** Persuasive essay includes (a) a topic sentence that is a complete sentence that addresses the topic, (b) more than 3 reasons, (c) at least 3 explanations, (d) 1 counter argument/point in the essay, and (e) an ending sentence that is a complete sentence that relates to the writer's position on the topic. Essay is written in a logical sequence that strengthens the writer’s argument.

**Score of 8.** Persuasive essay includes (a) a topic sentence that is a complete sentence that addresses the topic, (b) more than 3 reasons, (c) at least 2 explanations, and (d) an ending sentence that is a complete sentence that relates to the writer's position on the topic. Essay is written in a logical sequence that strengthens the writer’s argument.

**Score of 7.** Persuasive essay includes (a) a topic sentence that is a complete sentence that addresses the topic, (b) three reasons, (c) at least 2 explanations, and (d) an ending sentence that is a complete sentence that relates to the writer's position on the topic. Essay's sequence is weak, therefore limiting the writer’s argument.

**Score of 6.** Persuasive essay includes (a) a topic sentence that is a complete sentence that addresses the topic, (b) 3 reasons, (c) least 1 explanation, and (d) an ending sentence that is a complete sentence that relates to the writer's position on the topic.

**Score of 5.** Persuasive essay includes (a) topic sentence that is a complete sentence that addresses the topic, (b) 3 reasons, and (c) an ending sentence that is a complete sentence that relates to the writer's position on the topic.

**Score of 4.** Persuasive essay includes 4 of the following parts: (a) a topic sentence that is a complete sentence that addresses the topic, (b) reasons, or (c) an ending sentence that is a complete sentence that relates to the writer's position on the topic.

**Score of 3.** Persuasive essay includes 3 of the following parts: (a) a topic sentence that is a complete sentence that addresses the topic, (b) reasons, or (c) an ending sentence that is a complete sentence that relates to the writer's position on the topic.

**Score of 2.** Persuasive essay includes 2 of the following parts: (a) a topic sentence that is a complete sentence that addresses the topic, (b) reasons, or (c) an ending sentence that is a complete sentence that relates to the writer's position on the topic.

**Score of 1.** Persuasive essay includes one of the following parts: topic sentence that is a complete sentence that addresses the topic, reason(s), or an ending sentence that relates to the writer’s position on the topic.

**Score of 0.** No essay parts.