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The Writer's Workbook Intervention: Promoting Writing Achievement

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Keywords

writing, intervention, high school, SRSD
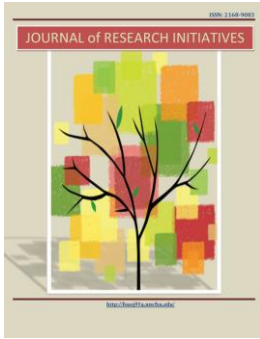
THE WRITER'S WORKBOOK INTERVENTION: PROMOTING WRITING ACHIEVEMENT

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Abstract

Research demonstrates that American high school students are not writing with proficiency, and teachers are not providing adequate writing instruction. This study examined the effectiveness of a writing intervention on achievement using pre- and post-intervention data. The instructional intervention combined self-regulated strategy development, peer and teacher feedback, reflection, and flexible writing practice to strengthen persuasive and argumentative writing in high school students. 95 ninth- and tenth-grade Delaware public school students in higher and lower-level classes participated in the instructional intervention, and twenty-five students' writings were scored before and after the intervention to assess growth. Pre/post mean ratings of writing quality significantly increased in the domains of development (+.56) and organization (+.96) when analyzed with a rubric. Findings from the study suggest that students benefit from strategic, feedback-laden writing instruction.

Introduction

In America today, we are met with an adolescent writing crisis. According to Greenwald, Persky, Ambell, and Mazzeo (1999), less than one-third of students in grades four, eight, and twelve were writing with proficiency on the National Assessment of Educational Progress (NAEP) Writing Assessment in 1998, with only one percent of students achieving the highest level, advanced. Nearly a decade later, on the 2007 assessment, NAEP reported gains for eighth and twelfth graders in writing from 2002 and 1998, with some evidence to support that the race gap was closing (Salahu-Din, Persky, & Miller, 2008). However, in the most recent assessment in 2011, only 24% of eighth and twelfth graders were writing with proficiency (National Center for Education Statistics, 2012). Results of the 2017 NAEP writing test will not be published until late in 2018 (National Center for Educational Statistics, 2017).

The problem is further analyzed in *Writing Next*. With so few students labeled as "proficient" writers by NAEP, the number of those who are considered "basic" or even "below basic" is staggering; the researchers state that these students, especially, need interventions to improve their writing (Graham & Perin, 2007). Rather than increasing writing interventions in schools to deal with this issue, some policymakers headed in the opposite direction; many states no longer test writing or are testing it with less frequency, with the result that teachers spend less time teaching it (Applebee & Langer, 2006). Even when writing is included in middle and high school state tests, essays often have less value than multiple choice and short answer items (Heller & Greenleaf, 2007). Furthermore, when No Child Left Behind emerged in 2002, an emphasis was placed on reading and math, with writing and other subjects "glaringly absent" (Pederson, 2007, p. 287). Indeed, since some states are no longer required to test writing, and since writing data does not count for accountability, teachers may spend less time preparing their students to write, using the instructional time for tested areas, instead.

The Writer's Workbook Instructional Intervention

The writer's workbook intervention, which was designed for and used in this study, utilized the six stages of SRSD (Self-Regulated Strategy Development) to support student achievement. In *Writing Next*, out of the eleven effective elements of instruction identified, Graham and Perin (2007) labeled strategy instruction as the most important. They stated that SRSD is the instructional strategy with the largest effect sizes, based on well-documented research across various SRSD and non-SRSD studies, with particularly great gains for low-achieving writers.

The writer's workbook incorporated De La Paz and Graham's (1997) STOP and DARE mnemonics as strategy instruction. In a study by Kiuhara, O'Neill, Hawken, and Graham (2012), high school learning disabled students were taught the STOP and DARE (as well as AIM) mnemonics while progressing through the stages of SRSD. As expected, the students participating in the study improved their writing by spending more time planning, including more essay elements, writing longer essays, and writing higher quality responses. Jacobson and Reid (2010) observed similar results when they used STOP and DARE with high school students with ADHD. The results of these studies suggest that strategic instruction taught through an SRSD model can effectively improve the persuasive writing of struggling high school writers.

Furthermore, the writer's workbook relies heavily on feedback from both the teacher and peers to support writing achievement. The teacher's feedback can be done in a way that individualizes instruction to help the student grow as a writer; by requesting elaboration in a piece of writing and modeling how to accomplish this in her comments to the student, she can play an important role in the student's development as a writer (Staton, Shuy, Peyton, & Reed, 1988). For example, in Wingate's (2010) study, students who made use of the instructor's comments improved their writing scores. Furthermore, Englert (1992) recommends a sociocultural approach involving collaborative dialogue between the teacher and student, the student and peer, and the student and self (through a "think sheet" or other reflective activity). The writer's workbook makes use of all of these activities.

Design and Methodology

Sample

The sample consisted of ninety-five students from two tenth grade lower-level English classes and two ninth-grade higher-level English classes in a Delaware public school. The tenth-grade lower-level classes included both regular and special education students who self-selected or were placed into the class by guidance counselors. The students in the ninth grade higher-level classes completed an application and testing process to place into an academic program with coursework that included this English class. Class enrollment in the four classes ranged from 18-30 students of diverse racial backgrounds, with, on average, slightly more males than females (see Table 1). In order to be included in the sample, students needed to be active members of the class during the time of the intervention. It should be noted that some students did not complete all writing activities, but they participated in the intervention at least partially by receiving instruction and writing responses.

The researcher was particularly interested in students who take lower level English classes who come from backgrounds where there may be some factors that make them less likely to achieve in writing (financial difficulties, lack of parental education, etc.). However, since students in higher-level classes can also experience low self-efficacy and the lack of motivation in writing, and since all students can improve their writing skills, the intervention was used in these classes, as well.

Table 1

Demographics of Sample

Category	n	Percent
Ethnicity		
African American	29	30.5
Asian	4	4.2
Caucasian	47	49.4
Hispanic	12	12.6
Arab/Middle Eastern	3	3.2
Gender		
Male	52	54.7
Female	43	45.3
Class grade and level		
10th-grade lower-level	50	52.6
9th-grade higher-level	45	47.4

Note: N=95

Data Collection Procedures

Over a three-month period from December 2012-February 2013 entailing twelve separate instructional/working sessions of twenty to forty minutes, the teacher provided instruction and the students completed assignments in the writer's workbook intervention. While the researcher would have preferred a shorter timeframe, the intervention spanned winter break, during which classes were not in session. Also, the teacher had other curricular concerns and thus could not focus her students on the writer's workbook every day, prolonging the intervention.

The teacher provided each student with a printed writer's workbook packet containing instructional materials such as writing prompts, reflective questions, gateway tasks to complete before progressing to the next stage of SRSD instruction, remedial or extending activities based on degree of mastery, graphic organizers, rubrics for self and peer assessment, guided notes for students to complete during direct instruction, and spaces in which to write paragraphs or reflections. Students handwrote all of their work in these packets. As they proceeded through the stages of SRSD within the writer's workbook, students received strategy instruction, reflected upon their learning and writing, selected choices from multiple writing prompts, shared writing, gave feedback to peers, rated their own writing quality with a rubric that specified writing goals, had opportunities for differentiated instruction through remedial or extending activities, practiced dialogic approaches to argument, and received feedback from the teacher and peers.

The researcher chose the Delaware Department of Education's argument/opinion text-based writing rubric to assess student writing samples; this rubric did not appear in the writer's workbook itself and was not used to award grades to students. Instead, the packets were graded for effort/completion. The rubric grades writing on a scale of 1 (low) to 4 (high), with proficiency set at 3, in the categories of reading/research, development, and organization. While the rubric also has a section to assess language/conventions, the grammatical improvement was not one of the goals of this intervention, so this part of the rubric was not utilized.

After establishing 81.8% inter-rater reliability by grading two rounds of ten or more practice essays, two raters (the teacher and a pre-service teacher, whom she had previously

trained to use the rubric) assessed thirty randomly selected pre-intervention writing samples with the Delaware Department of Education's argument/opinion text-based writing rubric. Students from both grades/levels were included in this smaller sample. When the raters disagreed on a score for a category, they discussed and came to an agreement upon which score the essay should receive in that area of focus.

While ninety-five students participated in the intervention, the raters did not have time or availability to score all of the pre-intervention writing from the entire sample. Twenty-five out of the original thirty students whose pre-intervention writing samples had been scored completed the intervention and submitted final responses. Five of the students whose pre-intervention writing had been scored did not submit final responses, so their writing growth could not be assessed.

Following the completion of the intervention, each student's writer's workbook packet was collected and scored (with the Delaware Department of Education rubric) by the same two raters for the final writing piece, an independent argumentative writing assignment. Seventy of the original ninety-five students submitted completed packets with final argumentative writing that could be scored.

Although the focus switched from persuasive, non-text based writing to text-based argumentative writing in an effort to give students practice with both genres, the data collected from the smaller sample of twenty-five serves as a comparison of what students could accomplish before and after the writer's workbook intervention. As the pre-intervention response was not text-based, it was not scored in the reading research domain on the rubric. Though persuasive writing has long been tested on state writing tests such as NAEP, the introduction of the Common Core State Standards in 2010 brought a shift in focus to argumentative writing, noting "the special place of argument" (p. 24) due to its impact on post-high school writing demands and an emphasis on evidence-based claims. When students work with an argument, they are forced to think critically and consider multiple perspectives, thus better preparing them for college and career writing. Therefore, instead of using the terms "argumentative writing" and "persuasive writing" interchangeably, the Common Core differentiates the two by stating that argumentative writing uses claims and evidence to develop the argument, while persuasive writing uses techniques that appeal to emotions or credibility (Common Core State Standards Initiative, 2010).

Results

As evidenced in Table 2, which provides data for the smaller sample of twenty-five students who received scores for both their pre- and post-intervention writing, students' post-intervention scores were higher overall than their pre-intervention scores. Although some students maintained or even decreased in a domain, many students gained one or more points in one or both categories. Mean ratings increased significantly in both development (+.56) and organization (+.96), with mean ratings in an organization (2.60) approaching proficiency. In both development and organization, the standard deviation was far lower in the pre-intervention than in the post-intervention writing scores; this suggests that, while many students scored poorly in the pre-intervention sample, some improved while others did not, resulting in greater variance. It should be noted that the writing samples were taken from eleven ninth grade, higher-level students and fourteen tenth grade, lower-level students.

Table 2

Pre- and Post-intervention Writing Sample Scores

Student	Development				Organization				Reading research	
	Pre		Post		Pre		Post		Post only	
1	2		3		2		3		4	
2	2		3		2		3		3	
3	2		2		1		3		2	
4	3		4		3		4		4	
5	2		3		2		3		3	
6*	2		3		2		3		2	
7*	2		2		1		2		2	
8*	1		2		1		2		2	
9*	2		1		2		2		1	
11*	2		2		1		3		1	
12*	2		2		2		2		2	
15*	2		2		2		3		3	
16*	2		3		2		2		2	
17*	2		2		1		1		2	
19*	1		2		1		2		2	
20	2		3		2		3		3	
21	2		3		2		4		3	
22	1		3		1		4		4	
23	3		2		2		3		3	
24	1		3		1		3		3	
25*	2		3		2		2		2	
27*	2		2		1		2		1	
28*	2		2		1		1		1	
29*	2		2		2		2		3	
30	2		3		2		3		3	
Summary statistics	Mean Pre	SD Pre	Mean Post	SD Post	Mean Pre	SD Pre	Mean Post	SD Post	Mean Post	SD Post
	1.92	.49	2.48	.65	1.64	.57	2.60	.82	2.44	.92

Notes: N=25; SD refers to standard deviation. Mean ratings can range from highest (4) to lowest (1), with writing proficiency set at 3. Students 10, 11, 13, 14, 18, and 26 from the original sample are not represented due to failure to submit a final argumentative writing piece. The mark of * represents that the student was in a lower-level class.

Whole class results

      To better understand whole class achievement, post-intervention writing of the entire sample was assessed; however, pre-intervention samples for all of these students were not scored due to the time restrictions of the raters. Therefore, pre- and post-intervention writing scores of the entire sample cannot be compared, and growth cannot be measured. However, this data demonstrates student achievement of the larger group of seventy students who completed the writer's workbook intervention; twenty-five of the original ninety-five failed to submit a final writing piece.

      Due to the fact that there were two populations within the sample, higher-level and lower-level students, some datasets were analyzed separately (see Appendices B and C, Tables 5-8) to inspect differences in achievement between higher-level and lower-level students. Combined results of the samples (Table 3; see Appendix A, Table 4) were also assessed to understand the effects of the intervention on the achievement of the entire sample. Furthermore, proficient scores (4s and 3s) were collapsed into one category and non-proficient scores (2s and

1s) into another to more easily interpret proficiency versus non-proficiency (see Appendices A-C, Tables 4, 6, and 8).

Table 3

Results of Argumentative Writing Assessment from All Classes

Area of focus	4		3		2		1		Mean	Standard deviation	N
	n	%	n	%	n	%	n	%			
Reading research	13	18.6	27	38.6	24	34.3	6	8.6	2.67	.88	70
Development	9	12.9	33	47.1	26	37.1	2	2.9	2.70	.73	70
Organization	26	37.1	23	32.9	14	20.0	7	10.0	2.97	.99	70

Notes: N=70; Mean ratings can range from highest (4) to lowest (1), with writing proficiency set at 3.

As shown by the whole class data in Table 3, mean ratings for reading research, development, and organization were below, but approaching, writing proficiency. Whole class results yielded far more proficient than non-proficient scores for each category, with a significant amount (37.1%) of students achieving a 4, the highest score, in an organization. However, an alarmingly high percentage of lower-level students were still not writing with proficiency in any of the categories (see Appendix B, Table 6). Standard deviations were quite high, especially in the category of organization, suggesting that some students did not respond as well as others to the intervention. It is also important to note that, since far more higher-level than lower-level students were assessed for this writing piece, whole class results are skewed towards higher-level rather than lower-level students.

The journey of higher-level students

Higher-level students made great gains in writing after participating in the writer's workbook intervention. Despite any concern that strict strategy instruction might inhibit the growth of students who would be expected, based on successful admission into a higher-level program, to be stronger writers, only one of the eleven higher-level students whose pre-intervention writing sample was scored achieved writing proficiency in both development and organization (see Table 2). Therefore, it was obvious that these students could benefit from a writing intervention, as well. Out of these eleven students, all but one made advances from pre- to post intervention writing samples, with one writer moving from 1s to a 3 and 4. Only one student dropped his/her score in either domain, and this student improved in the other area. Everyone else either maintained or improved scores, suggesting that higher-level students were in need of strategy instruction.

Consider the writing samples of one of these students (#30), a B student whose scores moved from 2s in development and organization to 3s:

Pre-intervention writing from student #30

"I agree with the district requiring students to complete 60 hours of community service because it teaches kids to be responsible. When they help somebody or a bunch of people they have to be responsible at completing the task at hand. If they don't do it then they won't graduate from high school. Getting 60 hours is not hard because I am a freshman and I got all 60 hours done in 2 weeks over the summer volunteering at a summer camp. Volunteering also teaches kids to help one another out in a time of need."

Post-intervention writing from student #30

  "Media harms people's body images. Hollywood magazines make it seem that in order to have the "ideal" body type, you have to get an eating disorder (Paddock, C, 2010). Having an eating disorder is unhealthy for your body because it provides your body with a lack of nutrients. Magazines also use software to digitally enhance the celebrities body to make them appear better (Paddock, C, 2010). This means that people are trying to obtain a "non-existent" body type. Although magazines are taking responsibility for the body images if they take out those pictures from their magazine the magazine would not sell. People's body images are suffering because of the media."

Case study analysis

  This student's pre-intervention writing sample lacked paragraph parts and development. While it began with a clear topic sentence and covered several different ideas (being "responsible," the risk of not graduating if the hours were not complete, and the fact that completing the hours "is not hard"), the ideas lacked coherence; they were only loosely connected to the claim that students should complete community service. Additionally, the student failed to provide elaboration on what being "responsible" actually meant or how completing the hours would lead to this benefit. Furthermore, the student made no attempt to address the counterargument or provide closure.

  Post-intervention, the student demonstrated a much better command of the organization, as he at least made an attempt to include all of the paragraph parts. He provided reasons, pulling information from his source, and elaborated upon those ideas; even though he could have improved these explanations, it is an advancement that he understands the need for development. The area in which it seems the student struggled the most was in his opposition and rebuttal; he sets up for the opposition appropriately with "although," but his claim that "magazines are taking responsibility for the body images" fails to support or explain this. He then seems to excuse the behavior of the magazine companies rather than critique it; his attempt at a rebuttal actually supports the opposition. Still, although this student needs more guidance to transcend simple writing proficiency, he now has the basic skills he needs as evidenced by his improved scores.

Summary of all students' writing achievement

  Students of varying ability levels increased their scores after having participated in the writers' workbook intervention. Nearly all of the twenty-five students (Table 2) improved from pre- to post-intervention assessment in one or more domains. Also, whole class results were very positive, as many students achieved proficiency or even mastery in one or more writing domains. Finally, data from the case study expresses significant changes from pre- to post intervention writing.

Limitations of the Study

  A serious limitation of this study is that pre-intervention writing was not scored for the entire sample, limiting the analysis of growth. Only twenty-five students yielded both pre- and post-intervention scores. If the raters had scored the pre-intervention writing for the entire sample, the effectiveness of the intervention could be better assessed, as seventy of the original ninety-five students completed pre- and post-intervention writing.

  With limited resources available for this study, the teacher who delivered instruction also rated the writing samples. This could be seen as biased since she hoped to see improvement in her students' writing. If an outside rater assessed writing samples, the possibility of bias would be removed.

Another weakness is that many students' (twenty-five of the ninety-five) final writing pieces were not submitted. Fourteen students submitted writers' workbooks that did not contain the final argumentative writing session, so achievement could not be determined. Also, eleven students' writers' workbooks could not be retrieved for data analysis: two students were placed in outside agencies and were not attending school, two students were absent during the collection timeframe, one student had recently sustained a concussion and was placed on academic restrictions, one student's writer's workbook mysteriously disappeared after submission to the teacher, and five students simply neglected to submit their workbooks despite multiple reminders from the teacher during the week of collection.

In the lower-level classes, only 28 out of a possible 50 students yielded assessment data. Since the intervention was specifically focused upon struggling writers, more information from these students is needed. Without this data, it is impossible to fully understand the effects of the intervention.

Recommendations

Changes must be made to ensure that more students submit a final product and take it seriously as a writing assessment. Students finished their writers' workbooks at varying times; some students had completed the final argumentative piece while others were still working on the early stages of the writer's workbook. If the teacher treated the final session as an in-class testing session, more students may have used the assessment as an opportunity to demonstrate their writing abilities. Although some students would not have completed each writing session and therefore would not have had all of the possible benefits of the intervention, treating the final piece as a writing test would likely have resulted in close to 100% participation. Thus, more information could be determined on the effect of the writing intervention on all students.

The fact that not all students finished activities leading up to the final assessment must also be addressed, as these practice sessions are critical for building writing fluency and scaffolding development. Although time is always a crucial factor in planning instruction, it may be that students need another checkpoint in their gateway tasks in addition to the ones they completed before progressing to the next stage of SRSD. In the current set-up of the writer's workbook, students completed an extending or remedial activity and simply moved on to the next session with or without reading the teacher's comments. Yet, if the teacher formulated at least one question to each student after checking that he/she had written a response, evaluated it with the rubric, received peer feedback, and completed a remedial or extending activity, the student could then be required to respond back to the teacher's question. By including this small dialogic piece, the writer's workbook could hold students more accountable for their improvement, as feedback is so critical to students' writing development (Patthey-Chavez, Matsumura, & Valdés, 2004), especially when students are instructed in how to make use of those comments (Wingate, 2010).

Despite its limitations, this study adds to the body of literature suggesting that students of varying abilities can benefit from strategic writing instruction as well as feedback.

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Appendix A: Collapsed Results of Independent Argumentative Writing Assessment for All Classes

Table 4

Collapsed Results of Argumentative Writing Assessment for All Classes

Area of focus	4s and 3s (proficient)		2s and 1s (non-proficient)		N
	n	%	n	%	
Reading research	40	57.1	30	42.9	70
Development	43	61.4	27	38.6	70
Organization	48	68.6	22	31.4	70

Notes: N=70; Mean ratings can range from highest (4) to lowest (1), with writing proficiency set at 3.

Appendix B: Results of Independent Argumentative Writing Assessment for 10th Grade Lower-Level Students

Table 5

Results of Argumentative Writing Assessment for 10th Grade Lower-Level Students

Area of focus	4		3		2		1		Mean	Standard deviation	N
	n	%	n	%	n	%	n	%			
Reading research	0	0	5	17.9	17	60.7	6	21.4	1.96	.64	28
Development	0	0	4	14.3	22	78.6	2	7.1	2.07	.47	28
Organization	0	0	9	32.1	12	42.9	7	25.0	2.07	.77	28

Note: N=28; Mean ratings can range from highest (4) to lowest (1), with writing proficiency set at 3.

Table 6

Collapsed Results of Argumentative Writing Assessment for 10th Grade Lower-Level Students

Area of focus	4s and 3s (proficient)		2s and 1s (non-proficient)		N
	n	%	n	%	
Reading research	5	17.9	23	82.1	28
Development	4	14.3	24	85.7	28
Organization	9	32.1	19	67.9	28

Note: N=28

While no students achieved a score of 4 in any category, many students (32.1%) achieved writing proficiency for the organization; it should be noted that standard deviation was quite high for this category, indicating that results were quite varied. Means for development and organization were both over 2, while the mean for reading research was just under 2. Most students did not achieve writing proficiency in any category, suggesting that they are in need of additional writing interventions.

Appendix C: Results of Independent Argumentative Writing Assessment for 9th Grade Higher-Level Students

Table 7

Results of Argumentative Writing Assessment for 9th Grade Higher-Level Students

Area of focus	4		3		2		1		Mean	Standard deviation	N
	n	%	n	%	n	%	n	%			
Reading research	13	31.0	22	52.4	7	16.7	0	0	3.14	.68	42
Development	9	21.4	29	69.0	4	9.5	0	0	3.12	.55	42
Organization	26	61.9	14	33.3	2	4.8	0	0	3.57	.59	42

Notes: N=42; Mean ratings can range from highest (4) to lowest (1), with writing proficiency set at 3.

Table 8

Collapsed Results of Argumentative Writing Assessment for 9th Grade Higher-Level Students

Area of focus	4s and 3s (proficient)		2s and 1s (non-proficient)		N
	n	%	n	%	
Reading research	35	83.3	7	16.7	42
Development	38	90.5	4	9.5	42
Organization	40	95.2	2	4.8	42

Note: N=42

No students from this subgroup received a 1 in any area, and most students achieved writing proficiency in every domain. Students scored particularly high in the organization, with a mean rating of 3.57. The standard deviation was highest for reading research, indicating that student responses were most varied for this aspect; additionally, more students failed to achieve writing proficiency in reading research than in the other categories.