Writing Strategies and Older Students with Learning Disabilities

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"There is nothing to writing. All you do is sit down at a typewriter and bleed."

― *Ernest Hemingway*

For students with learning disabilities, completing written assignments comes with a feeling of loss of blood, and often sweat and tears as well.   Unlike spoken language, manipulating language through writing is an unnatural convention and one that is relatively new to humans (Shaywitz, 2003). It is also one of the most complex activities in which a student can engage.

The act of writing involves using several skills simultaneously. These skills include drawing on background knowledge to determine a topic, organizing and structuring those ideas in a logical and sequential fashion, putting those ideas down on paper with clarity and a style appropriate to a specific audience, and then editing and revising to ensure the reader's comprehension and engagement (Baker, Chard, Ketterlin-Geller, Apichataburta, & Doabler, 2009). Applying these skills in a consistent, cohesive manner is a challenge for many students. For students with learning disabilities, the process of writing is especially challenging (Walker, Shippen, Alberto, Houchins, & Cihak, 2005).   In fact, Graham and Harris (2011, p. 422) state that "only 6% percent of eighth-grade and 5% of 12th-grade students with disabilities perform at or above the 'proficient' level in writing (defined as solid academic performance)."

Students with learning disabilities struggle in activating prior knowledge for topic generation and with demonstrating planning behaviors (Englert, Zhao, Dunsmore, Collings, & Wolbers, 2007). In their work with college students, Allsopp, Minskoff, and Bolt (2005) found that students with learning disabilities lack learning strategies, specifically strategies to aid

students in the writing process. They recommended that this type of strategy training take place

at the high school level; however, Asaro-Saddler and Saddler (2010) suggested early

instructional interventions in writing can be beneficial as well. Whether presented earlier or later

during their school career, directly teaching writing strategies to students with learning

disabilities can result in measurable improvements in writing production and quality (Baker et

al., 2009). Not only does production and quality improve, but the writing achievement scores of

students with learning disabilities have been shown to improve as well (Walker et al., 2005).

This review focuses on literature dealing with strategies for writing for older students

with learning disabilities. Specifically, the literature in this review deals with strategies that have

developed from both cognitive/motivational conceptualizations, which looks at aspects of

writing such as student ability and mental processes, and social/contextual conceptualizations,

which looks at collaboration and the writing environment (Graham & Harris, 2011) .

In the following three sections, I will provide a brief summary and critical analysis of

five articles regarding writing strategies for high school students with learning disabilities, a

discussion of the overall findings from these five articles, and implications for leadership

responsibilities.

Graham, S., & Harris, K. R. (1989). Improving learning disabled students' skills at composing

essays: Self-instructional strategy training. *Exceptional Children, 56*(3), 201-214.

In 1989, Steve Graham and Karen Harris completed a quasi-experimental study with

three sixth-grade students with learning disabilities. The variables studied were the writing

ability of the students with learning disabilities and the use of a strategy that Graham and Harris

(1989) called self-instructional strategy training (SIST). The problem addressed by the study is

that students with learning disabilities have difficulty in all areas of the writing process. The

purpose of the study was to determine if providing students with a specific writing strategy

would increase their ability to generate, organize, and elaborate when given writing tasks.

Specifically, would teaching these students the self-instructional strategy result in increased

writing planning and production and would an increase, if any, generalize to various forms of

writing across settings? If taught a specific strategy for writing, in this case writing essays, then

students with learning disabilities will increase generation, organization, and elaboration in essay

writing tasks.

The authors used a "multiple-baseline across-subjects design, with multiple

probes in the baseline" (Graham & Harris, 1989, p. 206). During the baseline sessions, the three

sixth grade students, two girls and one boy, with learning disabilities were given several essays

and story writing prompts to complete. The prompts were reviewed to assess "functional and

nonfunctional elements, number of words written, cohesiveness, and overall quality" (Graham &

Harris, 1989, p. 202). The students then spent several 40-minute sessions (seven, five, and

eight, respectively) working individually with a special education graduate student who had been

trained in the self-instructional strategy. Essays and stories produced during these sessions

were compared to those produced during the baseline collection. The students did show an increase in essay elements, coherence, number of words written, and prewriting time. Story grammar elements did not show a significant increase. Maintenance probes showed continued, though somewhat limited, strategy use and similar outcomes to the writing students completed during the experimental stage of the study. At the completion of the study, the students and the instructor participated in interviews with the researchers and all reported that they felt the writing strategy instruction was helpful. This perception of benefit may also have contributed to the improvement of the students' writing skills.

This study displayed both strengths and weaknesses. One of the major strengths of the study is that the results appeared to support the research question and hypothesis. The results suggested that teaching students with disabilities a strategy for writing caused improvement in their writing skills. The researchers' choice of study design, the multiple-baseline design, with its emphasis on treatment application, also appeared to contribute to the students' success in using the strategy. This study also appears to lend itself to replication.   A primary weakness of the study is that random assignment and random sampling were not used. Also, the sample size was very small. These weaknesses may cause difficulty in generalizing the study's results to other and/or larger populations. However, the use of self-instructional strategy training appears to have potential benefits for improving the writing skills of students with learning disabilities. With its emphasis on the individual student, the self-instructional strategy falls under the cognitive/motivational theory of writing.

Hallenbeck, M. J. (1997). *From the inside out: Adolescents with learning disabilities think and*

      talk about writing (Doctoral dissertation). Retrieved from ProQuest.

As part of his fulfillments for the Ph.D. at Michigan State University in 1997, Hallenbeck

completed his dissertation on writing and adolescents with learning disabilities. For his study, he

used a resource class of four seventh grade students, two girls and two boys, with learning

disabilities. This study was a qualitative, action research study using a case study design. The

rationale for this study was to add to the body of special education literature in regard to the use

of collaborative and cognitive processes with older students with learning disabilities, from both

the students' and teacher's perceptions.

In the study, Hallenbeck used Cognitive Strategy Instruction in Writing (CSIW), "a

discursive strategy that engages students in writing apprenticeships and collaborations"

(Hallenbeck, 1997, p. 2). The purpose of the study was to develop a more thorough

understanding of how older students with learning disabilities view writing tasks, particularly

essays, and how their views change as their skills develop. His study contained two overarching

research questions: "1. What is the nature of the teacher's talk during collaborative discourse

about writing? and 2. What is the nature of students' collaborative talk about writing?"

(Hallenbeck, 1997, p.3-4).

Through the course of most of a school year, Hallenbeck guided his students through the

use of CSIW to work collaboratively as a class to craft several essay writing assignments, with

the students as both primary and secondary authors. Hallenbeck's unit of analysis for his study

was his classroom conversation with his students, which he collected through the use of

audio-recordings. Other data collection methods included student writing samples and interviews with the students, their parents, and other teachers with whom the students worked. At the completion of his study, Hallenbeck determined that the teacher, through the use of CSIW, exerted a positive influence on the students' success in terms of modeling, scaffolding, and creating a positive collaborative environment. Student benefits from the use of CSIW included improvement in the quality of the students' writing, increased responsibility for their own work, the ability to use scaffolding with each other, the development of collaborative skills in working with their peers, increased connections between reading and writing, and an increase in thinking about their own writing and themselves as writers.

As a teacher/researcher, Hallenbeck had to balance these two roles very carefully. Being the only researcher involved posed a limitation in this study, as did the use of only one class. He recognized that both of these limitations would make it difficult to generalize the results of his study beyond his own research setting.   Given that he did experience success using CSIW with one group of students in the school in which he works, it would seem reasonable that he could continue to use this strategy with subsequent classes to further assess its efficacy with students with learning disabilities across grade levels within that school.

This study is representative of the type of study I would like to perform for my own dissertation. It is simple but in depth, and addresses a real need and problem within a particular setting and for a selected type of student. I found this study interesting in the way it encompassed both the cognitive/motivational and social/contextual theories of writing simultaneously through the use of a cognitive strategy within a collaborative group setting.

Walker, B., Shippen, M. E., Alberto, P., Houchins, D. E., & Cihak, D. F. (2005). Using the

   Expressive Writing program to improve the writing skills of high school students with

   learning disabilities. *Learning Disabilities Research & Practice, 20*(3). 175-183.

Referencing work by Graham and Harris (1989), Walker, Shippen, Alberto, Houchins, and. Cihak (2005) completed a quasi-experimental study using a direct instruction writing strategy program, *Expressive Writing*, with a small group (three) of high school students with learning disabilities.

The study design was a type of multiple baseline design which did not depend on probes being continually collected. The variables associated with this study were the use of the *Expressive Writing* program, the participants' writing fluency scores based on a measure of correct word sequences (CWS), and the participants' scores from a subtest of the Test of Written Language, 3rd Edition (TOWL-3). The rationale for this study is that many students with learning disabilities have deficits in, and struggles with, written expression.

The authors noted that while prior research is limited, the research that has been completed demonstrated that direct instruction (DI) writing programs have been effective in improving the written expression skills of students with learning disabilities. This study sought to look specifically at the effectiveness of *Expressive Writing* for "the acquisition and maintenance of narrative writing skills for high school students with learning disabilities" (Walker et al., 2005 p. 177) within the framework of the several research questions regarding the acquisition, generalization, and maintenance of narrative writing skills.

The students were given both placement testing and pretesting to assess their appropriateness for the program and their pre-intervention writing skills. Once a stable baseline was achieved, the intervention phase was implemented. The intervention phase consisted of 50 consecutive lessons of 50 minutes each using the *Expressive Writing I* student and teacher preparation books which were presented to the participants in three four-member instructional groups. After all lessons were completed, the participants were given the alternate form of the TOWL-3 to assess generalization. Maintenance measures using CWS for each participant were taken at two weeks, four weeks, and then six weeks after the conclusion of the study. Results from the probes taken during both the intervention and maintenance phases showed that all three participants demonstrated improvement in their written expression skills.

The authors noted several limitations. The first limitation was the make-up of the instructional groups. The groups were pulled from a resource class specifically for this study instead of using students already grouped together as part of their regular class schedule. These groups were also taught by the authors of the study who were well-trained in using the *Expressive Writing* program instead of their regular teachers being trained in and then implementing the program. A second limitation of the study involved prompts about which the students wrote. The prompts were not drawn from the same source during each phase of the study. Some prompts involved only giving the students a topic sentence while other prompts included pictures, vocabulary, and a topic sentence. The third limitation was that the generalization measures did not include having the students use the skills they had acquired from the study to write about content from their actual classes. The prompts about which the students wrote during the maintenance phase were drawn from either the standardized writing tests or

from the program itself. A possible confound of this study was whether their skill improvement

came solely from the *Expressive Writing* program or was it influenced by skills learned in their

other classes.

Because the group size was small and artificial, it may be difficult to generalize the

results found by this study. Again, because the prompts were taken from the *Expressive Writing*

program and not from the students' other course work, generalization may be difficult to assess.

However, direct instruction has been shown to be an effective approach to use to teach skills to

students with learning disabilities (Graham & Harries, 2011). As a specific direct instruction

program, the use of *Expressive Writing* could potentially provide benefit to students with

learning disabilities who struggle with writing. The use of a direct instruction program, such as

Expressive Writing, fits within the cognitive/motivational theory of writing as it focuses more on

the individual student and his or her capabilities as a writer.

Chalk, J. C., Hagan-Burke, S., & Burke, M. D. (2005). The effects of self-regulated strategy

development on the writing process for high school students with learning disabilities.

Learning Disability Quarterly, 28, 75-87.

Chalk, Hagan-Burke, and Burke (2005) sought to replicate Graham and Harris's (1989)

study involving the use of self-regulated instructional strategies, since updated as self-regulation

strategy development (SRSD), to improve the writing skills of students with learning disabilities.

The use of the strategy with high school students with learning disabilities instead of upper

elementary students represented a major difference, however, between the Chalk et al. study and

Graham and Harris's study. Fifteen Caucasian tenth grade high school students with learning

disabilities, 11 boys and four girls, participated in the Chalk et al. study. This study was a quasi-

experimental study which used a repeated measures design. The two primary variables in the

study were "number of words written and quality scores based on a scoring rubric used by the

school district" (Chalk, Hagan-Burke, & Burke, 2005, p. 80). The rationale for the study was

that students with learning disabilities struggle with all parts of the writing process, and that this

struggle is especially pronounced for high school students with learning disabilities given the

large amount of writing expected. The purpose of this study was "to determine the effectiveness

of the SRSD model with three classes of high school sophomores with LD" (Chalk et al., 2005.

p. 78).

The 15 participants were administered lessons in self-regulated strategy development

during five sessions of 20-25 minutes duration. The students were taught a specific mnemonic

 device for essay writing to use as part of the SRSD. Probes taken during the intervention and generalization phases were measured against the baseline probes. The results of the study showed an increase in the number of words written and an improvement in the quality of the students' writing.

According to Chalk et al. (2005, p 86), "students benefited from an approach to writing that helped them develop strategies for brainstorming, semantic webbing, setting goals, and revising." However, despite these positive results, the study had three limitations that should be considered when evaluating the study's outcomes. The first major limitation was that the study did not have a control group and was not able to use random sampling or random assignment. Also, some of the students' writings were used both during the intervention phase, and then again during the evaluation phase, which caused some variances in scoring that may have given an inaccurate picture of student progress. Finally, because all of the students in the study were Caucasian, the authors suggest that "further research on strategy instruction across a range of cultures is needed to substantiate its effectiveness for students with LD" (Chalk et al., 2005, p. 86). In terms of writing theories, this study also fits the cognitive/motivational theory of writing.

Englert, C. S., Zhao, Y., Dunsmore, K., Collings, N. Y., & Wolbers, K. (2007). Scaffolding the

writing of students with disabilities through procedural facilitation: Using an internet-

based technology to improve performance. *Learning Disability Quarterly, 30*(1), 9-29.

Englert, Zhao, Dunsmore, Collings, and Wolbers (2007) conducted a quasi-experimental

study to determine the effects and outcomes of using a web-based, computer program, TELE-

Web, to assist a group of 13 older elementary students with learning disabilities with writing

difficulties as compared to a similar group of 11 students receiving those same strategies but in a

pencil-paper format. The independent variable in this study was the strategy instruction using

graphic organizers, mapping/webbing, and scaffolding, which was presented to both groups. The

dependent variable was the students' writing skills, as determined by their individual education

plans. The rationale for the study was that students with learning disabilities experience

difficulties with all aspects of writing, particularly expository writing.

The authors' specific purpose in conducting this study was "to investigate the effects of

scaffolding students' writing performance through the employment of two different conditions

that were exactly similar with the exception of the online scaffolding environment available to

students" (Engler et al., 2007, p. 12). The research question guiding this study was whether

having access to an online scaffolding program would improve the writing skills of students with

learning disabilities and difficulties in written expression. Englert et al. (2007, p. 12)

hypothesized that "the computer-assisted scaffolding conditions would facilitate the writing

performance of students with disabilities as evaluated through their incorporation of the text

structure elements into their written texts." The authors defined these text elements as a topic

sentence, supporting details sentences, and a conclusion, either in the form of a sentence or paragraph.

The students were placed in either the TELE-Web group or the pencil-paper group based on reading test scores. Instruction in using writing strategies, such as using graphic organizers, mapping/webbing, and scaffolding was presented in the same way to both groups with the exception of the use of TELE-Web for the experimental group. Scores on the students' pretest and posttest writings were compared using through the use of a rubric and analyzed through both an analysis of covariance and a multivariate analysis of covariance. Results of these analyses showed that both groups of students' writing improved. However, even though both groups demonstrated improvement, the students who used TELE-Web had a higher word count than the pencil-paper group and more fully developed use of text structures than the pencil-paper group. Maintenance probes were not performed as part of this study, so the long term effects of the use of both TELE-Web and the use of pencil-paper graphic organizers and scaffolding could not be assessed and would provide a basis for additional future research. The use of a computer program, such as TELE-Web fits within the cognitive/motivational theory of writing.

DISCUSSION

Conclusions

Three big ideas emerged from the review of the previous five articles. The first is that many students with learning disabilities have difficulties with writing. These difficulties run the gamut of writing conventions, from handwriting and mechanics to the entire writing process. As stated by Chalk et al. (2007, p. 75), "students lack a basic knowledge about how to approach writing and the writing process as a whole." Frequently, students with learning disabilities view writing tasks, particularly expository writing, as merely answering a question, and therefore, give only limited information, use very simple sentence construction, and their writing without summary or conclusion. Graham and Harris (1989, p. 201) noted that "learning disabled students' problems are, in part, due to difficulties in expressing the knowledge they have." Unfortunately, for older students with learning disabilities, writing demands only increase as they continue their school careers, and with that increased demand, comes the possibility of an exacerbation of their writing difficulties.

The second big idea from the literature is that direct instruction and use of strategies for writing are beneficial for students with learning disabilities. Strategies that developed from social/contextual and cognitive/motivational conceptualizations have been found to be particularly helpful for students with learning disabilities. These strategies include the use of self-regulated strategy development, as proposed and refined by Graham and Harris (1989), as well as the Cognitive Instructional Strategy in Writing (Hallenbeck, 1997). Research by Schumaker and Deshler (2009, p. 86) has also "showed that strategy instruction was associated

with growth in standardized writing test scores and produced favorable writing competency test scores." In addition, Walker et al. (2005) noted that delivering direct instruction in writing to students with learning disabilities led to improved outcomes in writing production and quality. Graham and Harris (2011) have also recommended the use of direct instruction with students with learning disabilities as effective in aiding these students increase their writing performance.

The third big idea from this literature review is that having a teacher who is well-versed in strategies for writing and is experienced in providing direct instruction in writing is integral to the success (or lack of) students with disabilities will have in improving their writing. According to Graham and Harris (2007, p. 426) "a social/contextual factor that . . . is particularly important to the development of poor writing skills is quality of instruction." Additionally, in their work with TELE-Web, Englert et al. (2007) acknowledged that for the all of that program's benefits, it was only useful insofar as there was a trained and qualified teacher to instruct and guide students through its use. Finally, the teacher as collaborator, not just instructor, allows for students to be more in charge of their own learning while still having a resource upon which to depend.

Implications

As previously stated, many students with learning disabilities often struggle with writing, in all of its aspects. For older students with learning disabilities, these struggles often become more pronounced as writing demands increase. Based on this limited literature review, several implications for dealing with this phenomenon exist. These implications lie in the areas of the

type of instruction needed to address this phenomenon, teacher preparation and education, and

directions for future research.

When planning programming at both a building and district level, school leaders should

continue to consider the needs of students with learning disabilities in the area of writing.

Shumaker and Deshler (2009) suggested that writing strategy instruction be included as part of a

school's English curriculum. If writing strategy instruction is implemented in schools as part of

the curriculum, then school leaders need to ensure fidelity to that curriculum in order to ensure

maximum student progress and success (Baker et al., 2009).

In order to implement writing strategy instruction to its fullest positive effect, teachers

must be trained in its delivery and use, both in teacher preparation programs and as practitioners.

Hallenbeck (1997, p. 344) asserted that "apprentice teachers should become aware of

collaborative teaching models that capitalize on children's natural inclination to talk and to work

together." On a more somber note, Graham and Harris (2011) acknowledge that too frequently

there is little to no attention is given to writing strategy instruction, or even just writing

instruction, in many teacher preparation programs. The obvious drawback to this problem is that

"until investments are made in professional development that emphasizes research-based

instruction for students with LD and administrators ensure that students with LD receive the

instruction, less than satisfactory outcomes will be the result" (Shumaker & Deschler, 2009). In

other words, the bad problem of students with learning disabilities struggling with writing will

only become a more intense problem. To combat this problem, Graham and Harris (2011)

suggested the use of such evidence-based practices as direct instruction and the use of writing

strategies, such as SRSD. Both of these practices fit within the social/contextual and cognitive/motivational theories of writing.

In conclusion, these researchers collectively suggested several directions for future research. As students with learning disabilities move further into the digital age, more studies involving the use of technology, both web-based programs and software, should be conducted (Baker et al., 2009; Schumaker & Deshler, 2009). Chalk et al. (2005) proposed that further studies involving students with learning disabilities and writing should encompass wider parameters in terms of age and culture and/or ethnicity. According to Walker et al. (2005) and Graham and Harris (1989), there should be ongoing studies in the use of direct instruction and of self-regulated strategy development with students with learning disabilities. Finally, Graham and Harris (2011) urge that more research be in the area of theoretical models to support the use of writing strategy instruction with students with learning disabilities.

Like any other group of students, students with learning disabilities need tools to help them be successful, both in and out of the classroom. Approaches such as direct instruction and the use of strategies offer tools to help students with learning disabilities have some success in writing, a skill that they will use both in and out of the classroom. Learning to use these tools effectively involves both a skilled teacher trained in the use of evidence-based practices, a commitment of time and resources from educational leaders to writing instruction, and ample opportunities for students with learning disabilities to practice using the tools given to them, both as individuals and in collaborative groups. Once students with learning disabilities can wield these tools effectively, then they can approach writing with both competence and confidence.

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