

National Association of Special Education Teachers (NASET)

THE PRACTICAL TEACHER

This Month's Topic:

Intervention for Struggling Writers in Elementary School: A Review of the Literature

By Jennifer Freesland

This issue of **NASET's Practical Teacher** was written by Jennifer Friesland. Many researchers have conducted studies on different methods to help students who are struggling with writing. In reviewing the following literature, there are a number of studies that touch on different aspects of writing. There are different types of interventions used during these studies, such as writing workshops, expressive writing, computer-based planning and playing music in the background. There are also studies on the types of measurements used to assess writing, since there is a gap in research that pertains to finding valid assessments to identify writing difficulties (Ritchey & Coker, 2014). Most of the studies focus on specific participants such as, students with Attention Deficit Hyperactive Disorder (ADHD), middle school age students, or students with Specific Learning Disabilities (SLD).

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Struggling Writers

Lienemann, Graham, Janssen, and Reid, (2006) conducted a study on improving the writing performance of six second grade, struggling writers. Their study was a multiple baseline across participants that looked at teaching students how to plan and draft a story that would improve their skill of writing a story as well as their narrative reading material (Lienemann et al., 2006). The participants of this study were a group of six second-graders, who were at-risk writers, from a rural elementary school. The group of six students were taught in two cohorts, which were randomly assigned to an instructor. The reason for the split of the six students was to avoid lengthy baselines. The students were told to write three or more stories during the baseline probe. The first student in each cohort did not start instruction until they had established a stable baseline, which showed the number of elements in their stories. Instruction was started and continued until that student showed mastery of the skill being taught.

The next student would not start baseline until the student before reach the criterion level of five story parts (Lienemann et al., 2006). During the independent performance the students were to write three to four stories right after the intervention was completed. Maintenance was conducted after two to four weeks after the end of independent performance (2006). The results of this study showed that indeed explicitly teaching students strategies for planning and writing a story was an effective instructional approach for these six students.

A study done in Italy by Re, Caeran, and Cornoldi (2008) was based on the expressive writing abilities of children who exhibit symptoms of Attention Deficit Hyperactivity Disorder (ADHD). The participants were two groups of 35 students, one group were students who were said to exhibit ADHD symptoms, while the other group was a control. All participants are from Northern Italy and were selected from state schools. In their classrooms all students were given two expressive writing tasks. The tasks were to write two letters, one describing how they like to spend their free time and the other describing the town where they live (Re et al., 2008). There were two different conditions that the students were exposed to; Condition without Facilitation (CWF), the student wrote freely like they would in a regular class during school hours, and Condition with Facilitation (CF), the students were given a guide scheme to follow. The guide scheme was based on the decomposition of the writing process into steps that involved boxes where the students would fill in with their writing (Re et al., 2008). The students did receive a one-hour training on expressive writing and how to use the guide scheme. The students writing was scored by two independent judges who were blind to the goal of this study they used a writing battery available in Italy (translated: Battery for the Assessment of Writing Skills of Children from seven to thirteen years old). The judges rated the students writing on four protocols, adequacy, structure, vocabulary, and grammar (Re et al., 2008). They also scored the writing on essay length, richness of themes, and percentage of errors. The results of this study were that both groups of students wrote more using the guide scheme than without. There was no difference in text length or richness of theme between the two groups. The percentage of errors was greater with the group of students who had ADHD then the control group. Overall both groups benefited from the use of the guided scheme.

In 2006, Berry's case study examined two inclusion teachers' beliefs (process writing or natural learning) on how to teach writing. The researcher were looking to find out what the nature of writing instruction is in the two classrooms, what the teachers believe about teaching, learning and inclusion in regards to writing and finally the researchers wanted to find out if there are similarities or differences regarding writing instruction linked to the teachers' belief. The research took place in two different inclusion classrooms at two different schools. The participants were two teams of collaborating teachers, each team contained a general education teacher and special education teacher, both full-time. The data that were collected from this research was in the form of teacher interviews, observation and field notes. There were two group interviews that were conducted one prior to data collection and a debriefing one at the end. The teachers were asked twenty-one questions that on five main topics that the researchers wanted to find out. There were 55 classroom observations that were collected throughout the study. Although both classes were inclusion both teams taught writing differently. One team was very structured in their curriculum and everyone in the class was taught together and moved along in the writing process together, whereas the other team used writing workshop with their class. Although the styles of teaching were different both teams of teachers believe the same things. They believed that indeed students with learning disabilities belonged in an inclusion classroom setting. They both incorporated instructional practices in their classroom.

Effects of Different Interventions

Jasmine and Weiner (2007) conducted a study which was based on exploring the writing process (drafting, revising, and editing) with students to help them become independent writers. The participants of this study were five and six year old first graders that attended a K-5 elementary school in New Jersey. The purpose of this study was to determine the extent to which Writing Workshop enabled first graders to become independent writers (Jasmine & Weiner, 2007). The strategies that were used during this study were implemented as part of the language arts curriculum (Jasmine & Weiner, 2007). The researchers held Writing Workshop on a weekly basis, sometimes two to three times a week for a thirty to forty minute time period. Each Writing Workshop time started with a mini-lesson where the teacher would introduce a specific skill of writing. The skill was then integrated into the workshop activity for that day (Jasmine & Weiner, 2007). During the first week of this study, the mini lesson was based on developing a rough draft. After the mini lesson the students would return to their seats and begin writing a rough draft. Once the writing portion was done, students were able to share their writing to the class from an author's chair. Throughout this time the students were engaged and listening, after the reading of the story, each student gave a positive comment and asked a question to the reader. This method continued for seven weeks. The writing skills that were taught during the mini-lessons were: peer conferencing, revision and editing.

The two weeks before the student's final week of this study, they were able to revise a rough draft with a peer, make changes, edit with a peer and edit again. The last week of this study the students were able to share and celebrate their work. The results of the study showed that the Writing Workshop model was an effective instructional method to learn the writing process by choosing a topic, revising and editing drafts, and sharing their work (Jasmine & Weiner, 2007).

There is a multiple baseline across subjects designed study that Gonzalez-Ledo, Barbetta and Unzueta, (2015) used to discover the effects of using a computer graphic organizer program to help plan out narrative arrangements. The subjects of this particular study were four fourth- and fifth-grade boys with Specific Learning Disabilities. The study was completed after school in the student's classroom which had computers, they would meet after school four days a week for a total of fourteen weeks (Gonzalez-Ledo et al., 2015). Prior to stating the baseline, the students attended three half-hour sessions where direct instruction in the narrative writing process was taught. When the students walked in to the classroom they had paper and a pencil ready for them, the instructor read them the prompt and gave the students the allotted time of thirty minutes to plan, write and edit a narrative story. After baseline but before the students moved into the intervention the students were trained individually after school on how to use the computer program Kidspiration for planning their writing (Gonzalez-Ledo et al., 2015). When familiarized with the program and proven that they could access the program and utilize it, they were given a writing prompt. The computer graphic organizer intervention was similar to the baseline but they students use Kidspiration 3.0 to plan out their writing instead of paper and pencil. The results of this study showed that all four students increases between baseline and intervention. The students were given ten minutes to plan their writing all students improved their time by decrease the time it took them to plan. There were also increases in total number of words written, amount of time spent on planning and number of common story elements (Gonzalez-Ledo et al., 2015).

The purpose of Legutko & Trissler's, (2012) study was to explore the effects of background music on writing performance. The subjects of this study were nine sixth grade students in a learning support class. The students all had specific learning disabilities in reading, writing, or both (Legutko & Tissler, 2012). The study lasted 21 weeks which was broken down into three sections. During first six weeks and last six weeks the students concluded their writing assignments without the intervention of music. The seven weeks in between was when the music accompanied the student in their writing. The classroom teacher had chosen the music that was played during the intervention, two pieces by Mozart. The results were that all the students improved their writing efficiency throughout the study (Legutko & Tissler, 2012). Students improved on writing words correctly during their three minute probe during the study. The environment did change with the use of music and then no music; the researchers said that there was a drop immediately during the week of change when the music was used and another when the music stopped. Over all with the changes in environment the students did improve their writing over the course of the study.

Hansen and Wills, (2014) piloted a study to demonstrate the effects of performance-based intervention along with a skill-based intervention on the writing skills of a single ten-year old boy. There were two writing skills that were to be used as the main measures targeted for change, they were; words spelled correctly and complete sentences. The design that the researchers had chosen to use was an ABABCACB reversal design. The procedure for baseline was that the child was given one writing probe per day which was timed for three minutes. The intervention sessions of goal setting plus contingent reward for words spelled correctly, were set up identically to the baseline, the only difference was that the child was asked to set a goal that was higher than his previous session (Hansen & Willis, 2014). The contingent reward was given to the student every time he reached his goal. If he did not reach his goal he was not given a reward. The researchers reverted back to baseline and then gave a single intervention of the previous intervention. The next condition that the student was exposed to was instruction, goal setting and contingent reward for complete sentences. At the start of this intervention the student was taught how to write complete sentences by showing the students examples and non-examples (2014). The goal was set for improvement only in this intervention and the reward was the same as in the first intervention. The results of this study were that the student did show increases during the different intervention phases but once the reward was taken away his scores would drop back down.

Englert, Zhao, Dunsmore, Collings, and Wolbers (2007) found that an internet-based technology helped improve writing performance of students with disabilities. The participants were 35 elementary students with disabilities and who receive writing accommodations and support in their classroom. Within this study, there were two groups, an experimental and a control. The experimental group was made up of 20 students, 13 of which were student with a learning disability, and the control group, which was made up of 15 students, 11 students with a learning disability (Englert, Zhao, Dunsmore, Collings, & Wolbers, 2007). Both groups of this study completed a writing sample two weeks before the actual intervention started. The students were told to write an informational paper about a farm animal using paper and pencil. The intervention groups took place two weeks after the baseline. The paper and pencil group were informed that they would be using strategies for planning and

organizing their papers (Englert et al., 2007). Both groups of students were told that they were going to write an informational paper for people who do not own any pets. The paper and pencil group were given a concept map which was already filled out with the categories that they needed to write about. The students brainstormed their ideas by recording in their concept map. The next day the students were told that they were to write a paragraph for each category they filled out. The teacher in charge, facilitated the group by guiding the students on how to write the rest of their paper. The experimental group used internet-based software called Technology-Enhanced Learning Environment on the Web (TELE-Web). The teacher in the experimental group gave the same instructions and process as the control group. The main difference between both groups was that the students in this group had access to the mapping tools and scaffolds available in the TELE-Web (Englert et al., 2007). The teachers in this group assigned one of the mapping tools that is offered in the TELE-Web. The categories that were in their mapping tools were the same categories that the control group used. All prompts for the students were on the computer. Teacher prompts would show up on a pop-up window when the program was started. The student also had boxes with the label of what they were to write in each box. The TELE-Web had a spell checker, it would read back what they student had written, and once the assignment was completed it was sent to the teacher. This studies results suggest that computer-supported environments could mediate and scaffold students' performance in writing (2007).

Writing Measures

McMaster, Du, & Petursdottir (2009), completed a study that provided information on two studies that examined technical features of curriculum-based measures for beginning writers. The participants for both studies were four, first-grade classrooms. The purpose of these studies was to report the technical appropriateness of curriculum-based measures for writing (CBM-W) for first-graders (MacMaster, Du, & Petursdottir, 2009). Study one included three tasks that the students were measured on, word copying, sentences copying, and story prompts. While study two measured four tasks, letter prompts, picture-word prompts, picture-theme prompts, and photo prompts. The teachers were asked to evaluate the students writing piece in the classroom setting. They used a 4-point scale to rate their writing. The authors also collected students' writing grades from district records. The CBM-W was measured first in February and March, then again in May (McMaster et al., 2009). The results of these two studies showed that the CBM-W generated reliable and valid scores. The authors concluded that the measures could be used to measure beginning writers.

The authors, Ritchey and Coker (2014), investigated the screening procedures for identifying writing difficulties in first grade students. The participants of this study were 150 1st grade students from three public elementary schools. Most of the students were in a general education classrooms. There were twelve teachers who participated in the study. The teachers used a district-developed curriculum that integrated reading and writing instruction and included writing workshop (Ritchey & Coker, 2014). The measures that were used to find a screening to identify writing difficulties in students where, Word Spelling, Sentence Writing, Picture Story Writing, Reading, Writing Achievement and teacher rating. Word Spelling, was an untimed spelling test that the students were asked to spell twelve words. Sentence Writing was to assess the students skill to write a word, phrase, or sentence in response to a prompt (Ritchey & Coker, 2014). Picture Story Writing was a task that included three pictures sequence and the students were asked to write about what was happening. To measure reading the school staff administered the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), Phoneme Segmentation Fluency (PSF), Nonsense Word Fluency (NWF), and Oral Reading Fluency (ORF) to the students. Each of these assessments tested something different. The PSF assessed the student's ability to segment two to five phonemes. NWF assessed the student's ability to apply letter-sound relationships to vowel-consonant and consonant-vowel-consonant nonsense words (Richey & Coker, 2014). The ORF tested the student's ability to accurately and fluently read grade level text. For writing achievement the researchers use The Woodcock Johnson Test of Achievement, Third Edition, to assess the student spelling and writing samples. The last measure that was used was teacher rating, this was when the teacher rated the students' overall writing achievement based on their classroom performance (Ritchey & Coker, 2014). The findings from this investigation found that it may be possible to identify which students may be at risk for writing difficulties. The authors of this study suggested that spelling was a good predictor of students who may be at-risk in writing.

In another study, Coker and Ritchery (2010) investigated the use of a science writing assessment with kindergarten and 1st grade students. There were 233 kindergarten and 1st grade students that participated in this study. Sentence writing, which was created for this study, and two norm-reference tests were given to the students as measurements. The students in kindergarten were given The Test of Early Written Language – 2nd Edition and the 1st grade students were given two writing subtests of the Woodcock Johnson Achievement Assessment 3rd edition as the norm-reference tests (Richey & Coker, 2010). In a six month time span the students in both grades were administrated the sentence writing measure three times.

The two norm-referenced assessments were given in April and May for the school year (Richey & Coker, 2010). For the kindergarteners, the assessments were done on an individual basis and for the 1st graders in a small group setting. The results of this study are that the sentence writing assessment is an appropriate assessment to see the developing writing skills of young students.

Research in the area of improving the writing skills of struggling writers focuses the following themes: that there needs to be a valid form of measurement when identifying writers who are struggling. As Coker and Ritchey (2014) had stated, “one gap in the research, of students who may be at risk for academic difficulties is, valid screening procedures for writing difficulties” (p. 54). Coker and Ritchey (2010) had also stated in another study that “there are few, if any, scientifically validated assessments of early writing that could be adopted to identify students with writing disabilities” (p. 175). Another theme of research in the area of improving writing skills is that, there has been many different types of interventions accomplished with the results showing that the students have succeed in writing while using the intervention. Such interventions covered a variety of different interventions such as, exploring the actual writing process, using a computer graphic organizer, and playing background music, to name a few. Most of these interventions focused on students with some type of specific learning disability.

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