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**THE EFFECTIVENESS OF THE WORD STUDY PROGRAM ON TEACHING
ELEMENTARY STUDENTS WITH LEARNING DISABILITIES**

by

Catherine M. DiPierro

A Thesis

Submitted to the
Department of Interdisciplinary and Inclusive Education
College of Education
In partial fulfillment of the requirement
For the degree of
Master of Arts in Learning Disabilities
at
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May 4, 2016

Thesis Chair: Joy Xin, Ph.D.

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Dedication

I would like to dedicate this manuscript to my parents, Tommaso and Elizabeth DiPierro.

Acknowledgements

I would like to express my appreciation to all the people that have helped me through this educational journey. I have gained skills and knowledge that I will carry with me into the next chapter of my life. I look forward to the challenges and triumphs that await me and am fully prepared to address them.

I would like to thank my parents, especially my mother for her unconditional support.

Abstract

Catherine M. DiPierro
THE EFFECTIVENESS OF THE WORD STUDY PROGRAM ON TEACHING
ELEMENTARY STUDENTS WITH LEARNING DISABILITIES

2015-2016

Joy Xin, Ph.D.
Master of Arts in Learning Disabilities

This study evaluates the effects of the *Word Study* approach on teaching decoding skills, oral reading fluency (ORF), and reading comprehension for students with learning disabilities. Five, 3rd and 4th graders with specific learning disability (SLD) participated in the study. A single subject design with multiple baselines across grade levels with AB phases was used in this study. During the baseline, students were assessed by a spelling inventory and comprehension rubric for 8 weeks. During the intervention, students were taught by lessons developed based on their word patterns with a discussion of words, grouped to complete activities including word sorting, word hunting, and passage reading. Same assessments were provided to evaluate their performance. The results revealed that three of the participants increased their words correct per minute (WCPM) and the other two did not; whereas all five of the participants increased their reading comprehension scores. The *Words Their Way* program seems to support student learning of both ORF and reading comprehension, and should be considered as an essential component of the elementary curriculum.

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Chapter 1

Introduction

Statement of Problems

The ultimate goal of reading is that students understand the meaning of the printed text from a variety of correspondence. The ability to comprehend is significant to a student's future success and is predicated on numerous factors, specifically emergent literacy skills, "the skills, knowledge, and attitudes that are developmental precursors" (e.g., phonological awareness, letter sound correspondence, and concept of text; Whitehurst & Lonigan, 1998, p. 848) to conventional forms of reading and writing e.g., word decoding, oral reading fluency (ORF), and spelling. An important component of reading comprehension is oral reading fluency, the ability to read text with accuracy, good expression, and at an appropriate rate. Considerable research has demonstrated that ORF-operationalized as the number of words read correctly per minute (WCPM), which is a good indicator of a student's overall reading skills (e.g., Fuchs, Fuchs, Hosp, & Jenkins, 2001; Jenkins & Jewell, 1993; Stahl & Kuhn, 2002; Yovanoff, Duesbery, Alonzo, & Tindal, 2005; Wiley & Deno, 2005). For instance, when students display a strong foundational background, such as phonemic awareness and phonics, they are pertinent to become fluent readers. Thus, lacking of fluency may make a student spend a great deal of energy on identifying words rather than gain meanings.

According to the New Jersey Administrative Code for Special Education (NJAC 6A:14-3.5), "specific learning disability corresponds to "perceptually impaired" and means a disorder in one or more of the basic psychological processes involved in

understanding or using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Notably, a specific learning disability (SLD) can be determined when there is a severe discrepancy between a student's current achievement and intellectual ability in one or more of the following areas: basic reading skills, reading comprehension, oral expression, listening comprehension, mathematical calculation, mathematical problem solving, written expression, and reading fluency" (p. 59). Students with SLD often struggle with reading, which affects their other subject learning. Oral reading fluency and reading comprehension are two key components to a student's educational success. Students who read with automaticity and have appropriate speed, accuracy, and proper intonation are more likely to comprehend material (Rasplica & Cummings, 2013). Reading comprehension is the capacity to perceive and understand the meanings of communicated texts. It requires the reader to be an active constructor of meaning. Reading is a "transaction" in which the reader brings purposes and life experiences to converse with the text (Wilhelm, 2007). Hence, reading comprehension directly correlates with fluency, and without comprehension, fluency is an empty shell (Rasinski, 2009).

Students with SLD are often confronted with a multitude of reading problems in the classroom, specifically in decoding and learning vocabulary words, while these skills highly affect oral reading fluency and reading comprehension. Good decoding is dependent upon phonemic awareness, phonics, and word retrieval to break the words into smaller pieces of sound (Shaywitz, 2003), and attach to specific letters. According to the

National Reading Panel (2001), this is often troublesome for students because the English language does not have a pure phonetic base. It is believed that there are 42 to 44 phonemes attached to the 26 letters of the alphabet. Difficulties can also arise when readers need to express a thought or name an object (Ylvisaker, Hibbard, & Feeney, 2006). In combination with decoding, prior knowledge and vast vocabulary words are needed to allow readers to rapidly make connections while reading.

In the past, several instructional strategies were provided in classrooms to improve reading fluency and comprehension of students with SLD. These strategies include: Orton-Gillingham approach, repeated readings, and reciprocal teaching. Orton-Gillingham is a flexible, multisensory, and sequential approach to teaching children with language difficulties. In this approach, students are presented with the sequential basics of language that is taught to mastery through visual, auditory, and kinesthetic learning networks. The multisensory approach begins with students mastering the most basic information before new and complex information can be taught. Primarily, students learn by hearing and saying the sounds of individual letters, and then writing the letters representing the sounds (Sheffield, 1991).

Instructional strategies in teaching oral reading fluency emphasize modeling fluent reading, repeated reading, and assisted reading to focus on performance reading. It is believed that the more practices in reading text the more fluent a reader will be (Rasinski, 2009). Repeated reading is designed to allow students to read and re-read a selected passage until reaching a satisfactory level of fluency. An example of oral reading performance used in the classroom is “Readers Theatre” to engage students in repeated reading process.

“Readers Theatre” has shown that students can make remarkable progress in only a few months, experience more than a year’s growth in overall reading, and make twice the gain in reading rate (Martinez, Roser, & Strecker, 1998). Development of an extensive vocabulary also helps students expand their knowledge of word meanings, so that they are able to make connections with meanings of their reading. (Lexia Learning, 2014).

Reading comprehension is to construct meaning from the printed words being read. One strategy for teaching reading comprehension is reciprocal teaching. During reciprocal teaching, students are asked to share their role of a teacher to lead the discussion about reading. The discussion includes predicting, question generating, summarizing and clarifying. It is found that reciprocal teaching is beneficial in teaching students how to determine important ideas from their reading while discussing vocabulary, developing ideas and questions, and summarizing information. This strategy can be utilized in several content areas, specifically with textbooks and non-fiction (Adolescent Literacy, n.d.).

Words Their Way is a reading program including spelling, phonics, and vocabulary with an open-ended individual learning process. An assessment is designed at the beginning to determine where the instruction should start. Based on assessment results, students are given words to study in order to discover the common attributes and to actively construct their own knowledge of spelling patterns. In the program, students are required to complete the activities such as word sorting, word hunts, word games, and drawing and labeling different words. The drawing and labeling activities are in combination with the WRS. For example, drawing a picture of the word being presented

and labeling each letter sound. Each part of the word is either underlined, starred, circled, with a breve, or a line atop. For instance, double letters are starred and short vowel sounds are signified with a breve, whereas suffixes are circled and long vowel sounds have a line atop. They can work individually, with partners, or in small groups to encourage cooperation and take individual responsibilities in their learning process.

Words Their Way is intended to be a part of a balanced literacy program that includes fluency, comprehension and writing. It is executed as a small constituent of the literacy plan, but is also interwoven in actual reading and writing texts. (Dearnley, Freeman, Gulick & Neri, 2002). Students are taught to discover the regularities and conventions of English orthography in these layers. According to Bear et. al (2009), the alphabet layer centers on the relationship between letters and sounds, and the pattern layer overlies the alphabet because a single sound is not always assigned to each letter. Once the previous layers are achieved, the meaning layer should be the main focus. This layer emphasizes groups of letters that represent the meaning directly. Along with these three layers, students' progress is managed through five stages of spelling development, such as Emergent, Letter Name-Alphabetic Spelling, Within Word Pattern, Syllables and Affixes, and Derivational Relations. Hence, the purpose of *Words Their Way* is twofold. First is to develop a general knowledge of English spelling, and learn how to examine words through active exploration using a manipulative approach, and the second is to increase learners' specific knowledge of words, relating to the spelling and meaning of individual words (Bear, Invernizzi, Tempelton, & Johnston, 2009).

Research on *Words Their Way* showed that learners became aware of the relationships among printed words, spoken language, and meanings. (e.g., Bear,

Invernizzi, Templeton, & Johnston, 2012; Berninger, Abbott, Nagy, & Carlisle, 2009). *Word Study* addresses all areas of literacy because learning in one area relates to developing skills in other areas to synchronize reading, writing, and spelling together. This combination has shown effectiveness on teaching reading to elementary students to improve their reading fluency (Bear, et. al, 2009). The concern about *Words Their Way* is its focus on spelling. It can teach learners word attack skills to use spelling patterns to figure out an unknown word, as well as spelling, while reading comprehension, vocabulary, and fluency are missed. To date, it is unable to draw any conclusions about the effectiveness of the inclusion of spelling of *Words Their Way* on beginning readers. Thus, additional research is needed to evaluate this program.

Significance of the Study

Orton-Gillingham approach, repeated readings, and reciprocal teaching are provided in reading instruction, as well as different programs such as Wilson Reading System, Reader's Theatre, and *Words Their Way*. To date, few studies have evaluated these programs practiced in the field based on student's performance. The present study is designed to examine the effectiveness of *Words Their Way* on decoding, oral reading fluency, and reading comprehension of students with SLD. It attempts to investigate how *Word Study* techniques, which encompass both *Words Their Way* and the Wilson Reading System, to improve overall reading performance of these students.

Statement of the Purpose

The purpose of this study is to evaluate the effects of the *Word Study* approach on decoding skills, oral reading fluency, and comprehension of students with SLD.

Research Questions

1. Will students with SLD improve their reading fluency by increasing their correct words read in one-minute when Word Study program is provided?
2. Will students with SLD improve their reading comprehension skills by increasing their weekly rubric scores when Word Study program is provided?

Definition of Terms

- Aphasia is a communication disorder that results from damage to the parts of the brain that contain language (typically in the left half of the brain). Individuals who experience damage to the right side of the brain may have additional difficulties beyond speech and language issues. Aphasia may cause difficulties in speaking, listening, reading, and writing, but does not affect intelligence.
- Automaticity is the fast, effortless word recognition that comes with a great deal of reading practice.
- Dyslexia is “a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequence may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge” (N.J.A.C. 6A:14-1.3) (International Dyslexia Association, 2002).

- Derivational Relations is used to describe the type of word knowledge that more advanced readers and writers possess. The term emphasizes how spelling and vocabulary knowledge at this stage grow primarily through processes of derivation-from a single base word or word root, a number of related words are derived through the addition of prefixes and suffixes.
- Intonation is about how we say things, rather than what we say. Without intonation, it's impossible to understand the expressions and thoughts that go with words.
- Orthography refers to the rules for writing a language, such as conventions of spelling and punctuation. In English, this definition also includes its grapheme-phoneme (letter-sound) correspondences.
- Phonemes are the smallest units of sound in a word.
- Phonemic Awareness is the knowledge that words are made up of a combination of individual sounds.
- Phonics is the relationship between a specific letter and its sounds, only as it relates to the written word.
- Phonological Awareness is the knowledge that there are patterns within words that can aid in both reading and writing.

Chapter 2

Literature Review

According to the National Assessment of Educational Progress (NAEP, 1995), fluency is defined as “the ease or ‘naturalness’ of reading” (p. 1). This includes: grouping or phrasing words as revealed through intonation, pauses, and expressing oneself in feeling and anticipation during oral reading. For the past 15 years, oral reading fluency (ORF) has taken a front seat in discussions about effective reading instruction and student success. ORF is an indicator of overall reading achievement because it builds a bridge to reading comprehension. Fluent readers can make mental connections throughout the text, and apply the connections to their personal experiences (Rasinski, 2004). Thus, reading comprehension is predicated on ORF. Students with SLD struggle with oral reading fluency and reading comprehension, which impede their overall reading skills. The literature related to strategies in teaching reading was reviewed and summarized in this chapter, including the Orton-Gillingham approach, “Reader’s Theatre”, and *Words Their Way* for ORF and reading comprehension.

Strategies in Teaching Reading

The strategies provided in teaching reading fluency to students with reading deficits emphasize modeling fluent reading, repeated reading, and assisted reading to focus on performance reading to improve overall reading achievement.

Orton-Gillingham approach. This approach was originally developed by Samuel Orton and Anna Gillingham to improve reading skills of students at risk. Bisplinghoff (2015) evaluated an Orton-Gillingham-Stillman (OGS) reading intervention

program for first-graders at risk for reading disabilities. The participants were selected based on their performance on the Standardized Test for the Assessment of Reading (STAR), with the lowest 25%. The STAR was also utilized to form a baseline prior to the intervention, as well as a pre- and post-test to measure students' mastery of early literacy skills. As for ORF, the students' general education teacher administered the pre- and post-tests, in which the students were required to read a passage in three minutes. During this time, the teacher recorded types and numbers of errors to calculate the correct words read per minute (WCPM). The final sample of the study consisted of 21, first graders from one charter elementary school; equally splitting the males and females between the control (10) and experimental (11) groups. The students were further divided into four subgroups according to their literacy classification. The intervention consisted of 49 sessions, 30 minutes each, 4 days a week for 18 weeks. Two teachers provided the OGS program to the control group and the other two teachers used the trial intervention with the experimental group. The program for the control-group focused on phonemic and phonological awareness, phonics and decoding, and ORF. Each lesson began with modeling a new concept using a flip chart, students practiced the concept with the teacher, followed by teacher guided independent practice, and checking for understanding to reinforce skills for proficiency. Consequently, the experimental group was provided with explicit instruction for phonemic awareness, phonics and decoding of short vowels/common consonant sounds, reading and spelling of letter/digraph blends, and reading and spelling of one-syllable words combined with the explanation of spelling rules. Each lesson began with reviewing concepts previously taught, followed by the introduction of one or two new concepts. The new concepts were taught and reinforced

using visual or mnemonic devices to assist with retention. Students engaged in a series of lessons to improve their emergent literacy skills. For example, at first, the students read real and nonsense words using virtual tiles projected on an interactive white board, then broke apart each word beginning with the individual sounds. They blended the sounds together at different rates of speed, starting out slowly and then quickly to read each word fluently. Following the reading, the teacher dictated the words and the students built real and nonsense words using virtual tiles. This activity was continued with manually writing the words on paper, followed by reading and writing dictated phrases on paper. Then, students built sentences with the phrases using color-coded sentence strips. Lastly, students completed writing sentences on paper, reading a short passage containing words previously taught, and retelling the passage in their own words to check comprehension.

Six sub-domains were suggested to analyze student performance on decoding skills. These included: alphabetic principle, concept-of-word, visual discrimination, phonemic awareness, phonics, and structural analysis. Even though there wasn't a substantial difference in the means of the pre- and post-tests of these sub-domains, the experimental group had a greater increase in their mean scores in the individual sub-domains than did the control group. The range of the increase in each sub-domain was 2.25% to 7.52% higher than that of the control group. Similar results revealed that there wasn't a significant difference for ORF, on the correct words read per minute. Actually, the mean score of the control was higher than that of the experimental group by an increase of 6.66 words correct per minute. Reading comprehension was evaluated on three sub-domains: vocabulary and both sentence and paragraph-level comprehension.

The experimental group's range of increase in mastery of each of the sub-domains was 4.08% to 6.51%, higher than the control.

In conclusion, students in the OGS-influenced program showed their improvement in reading (e.g. Bisplinghoff, 2015). Students in the experimental group achieved a greater increase in 10 of the 12 areas compared to those in the control. Despite the positive results, some concerns were raised because the study was conducted in one charter elementary school for a short period of time. Therefore, longer implementation may be suggested to identify whether the OGS-influenced program will be considerably more successful as compared to the traditional. Future research should be conducted with a larger sample, over a longer period of time, beginning earlier in the school year to identify whether one program is suggestively more successful in supporting improvement of students' reading skills. Including a diverse student population may yield important results to guide instruction to support acquisition and improvement of critical reading skills.

Trepanier's study (2009) evaluated the Orton Gillingham (OG) program embedded into existing school curriculum for reading achievement. Specifically, the study examined the reading achievement scores as well as reading fluency and comprehension of students who were taught to read through the OG phonetic instructional program paired with a basal reading program, compared to those who were taught to read using only the Macmillan/McGraw-Hill Spotlight on Literacy basal reading program. A total of 29 1st and 31, 2nd graders participated. The experimental group consisted of 15, 1st graders and the control comprised 14. The experimental group involved 16, 2nd graders and the control consisted of 15. A basal reading program was

used for the control, and OG was provided for the experimental for a year. The experimental group spent 120 minutes per day on reading instruction, during which students were exposed to an approach for phonetics emphasizing visual, auditory, and kinesthetic learning styles (Institute for Multi-Sensory Education, 1999). On the other hand, basal reading program for the control was focused on high-interest, multilevel literature and learning to become an independent reader through phonics, skills, and strategy instruction. This in turn, develops Language Arts competency through lessons and activities for spelling, writing, grammar, listening, and to increase knowledge through integrated technology. The lessons are laid out in a suggested 5-day planner providing an array of options, from a whole group to flexible grouping. A plan is outlined each day to read the literature as well as lessons on spelling, grammar, and mechanics. The STAR Reading test, a computer adaptive assessment was selected to evaluate student performance as the pre- and post-test to provide a quick and accurate estimate of students' reading levels (Renaissance Learning, Inc., 2007).

The results showed that there wasn't a significant correlation between the reading achievement scores of these students and those receiving the basal program only. The difference between the pre- and post-test for the first-grade experimental group showed that students made a gain in their reading level of at least 1-year, and in the second-grade experimental group a 7 month gain was made. As for the control groups, the first-graders made a 6.5 month gain and the second-graders made an almost 7 month gain.

It revealed that supplementing phonics instruction to an existing basal program did not show a substantial difference in student achievement when an OG approach was implemented. However, the researcher was able to compare the effectiveness of the OG

Instructional Program with a basal program to a basal only program. Even though the results showed increased student reading levels, it is recommended that a larger sample size, different grade levels, and comparisons to other schools using the OG program be used to validate the finding. There appears to be an abundance of research on the OG program for first or second graders, while younger children or higher graders may need to be involved. A longitudinal study is also suggested to track student progress through comparative analysis.

Despite positive outcomes (e.g., Bisplinghoff, 2015; Trepanier, 2009), some concerns were raised in regard to the OG intervention program to improve the reading skills of students with emotional behavior disorders (E/BD) with reading difficulties (e.g., Davis, 2011). In this study, 4 male, 4th through 8th graders, ranging in ages from 10-14 participated. Each student had an Individualized Educational Plan (IEP), involved as outpatients in a Partial Hospitalization Treatment Program at an urban school. Each student participated in an OG-based reading intervention program 45 minutes per session, twice a week for 16 weeks. Each lesson was individualized, focusing on new skills while continuing to reinforce skills previously taught. Lessons consisted of 6 different multisensory drills: visual, auditory, blending, introduction of a new skill or review of the previous lesson, oral reading, and a 10-point Probe using words from previously learned and current skill sets. After each drill, the student was allotted 10-15 minutes of free time prior to returning to class.

A pre-and post-test was administered using two different versions of the first grade Dynamic Indicator of Basic Early Literacy Skills (DIBELS) to measure reading skills. Prior to each lesson, an informal assessment (2-3 minutes) was administered to

assess the student's sense of well-being. Each lesson was individualized, focusing on new skills while continuing to reinforce skills previously taught. Lessons consisted of 6 different multisensory drills: visual, auditory, blending, introducing a new skill or reviewing the previous lesson, oral reading, and a 10-point Probe using words from previously learned and current skill sets. After each drill, the student was allotted 10-15 minutes of free time prior to returning to class.

The results indicated that 3 out of the 4 students completed the entire OG intervention program by measuring reading achievements in the baseline, intervention, and maintenance. Two students made improvements for Nonsense Word Fluency (NWF) and Phonemic Sound Fluency (PSF), moving from emerging to the established category. Each of them showed progression and mastery of decoding skills. One showed steady progression through 7 skill sets, another completed a maximum of 2, and the rest accomplished 4. Conversely, each of the students remained in the "risk" range for Letter Naming Fluency (LNF) and ORF, showing that the OG intervention program may benefit only some students.

The research revealed that the findings may not be statistically significant because a 16-week intervention is limited with a small group size from a self-contained school. Another concern was that the baseline was not established prior to the intervention, which may cause an overlap between the baseline and intervention scores making the study less effective. It is suggested that future research be conducted to validate the overall effectiveness of an OG intervention program for students with E/BD and reading difficulties.

Readers' Theater. The term, Readers' Theater dates back to 1945, however more recently, educators have incorporated this instructional program into their reading curriculum. Hymes (2013) assessed whether Readers' Theater would improve the oral reading fluency of second graders regardless of their reading abilities. Six children, 4 females and 2 males, were selected based on their reading fluency and teacher's observations. Of these, two scored below grade level, two on-level, and the rest of two above grade level. The study was implemented for 6 weeks and consisted of three different assessments: Oral Reading Fluency (ORF) Assessment, Multidimensional Fluency Scale (MFS), and a Fluency Observation Data (FOD) Chart. The first assessment, ORF, measured the readers' accuracy and automaticity when orally reading a passage. Each student was asked to cold read a passage for 1 minute, and then words read correctly were counted to determine the word count. This test was administered to establish each student's baseline fluency rate score (WCPM). Once the baseline was obtained, an oral reading fluency test was given every two weeks to determine if there had been an increase. The second assessment was the MFS which assessed each student's fluency area: oral reading volume and expression, phrasing, smoothness, and pace. This test was given prior to implementing Readers' Theater, at the 3rd week, and then at the end of the 6th week. Students' reading fluency was measured using a rating scale of 1-4, and the three scores were added together for the overall fluency rating to find total growth. The final assessment, FOD chart, was used to measure student's fluency through anecdotal notes. This chart was utilized during guided reading groups when students read orally during individual reading conference to focus on the six areas of fluency: pausing, phrasing, stress, notation, rate, and integration.

The entire class, including the participants, were divided into several groups and given Readers' Theater scripts according to their individual reading levels. Each script spanned over a 2 week period and followed the weekly reading fluency schedule. Initially, the students were divided into guided reading groups. They were given 15 minutes to review the script, make predictions, discuss vocabulary words, and ask for assistance with unknown words. Following the review, the teacher modeled expressive language and instructed students to read through the script together. The subsequent 6 days consisted of targeting one fluency skill (pausing, phrasing, stress, notation, rate, and integration) as a group, guided reading group discussion, and independent practice per day. On the 8th day, each group of students presented their Readers' Theater Performance critiqued by their peers. The final two days were scheduled for coaching time, discussing each group's performance, and meeting with those who struggled with the targeted fluency skills.

The results revealed that student fluency levels were improved. Every participant increased his/her reading rate, multi-dimensional scores, and became a more expressive and prosodic reader. One student considered below grade-level, showed the most growth on each assessment, especially in ORF. The average scores were 36 (wcpm) and increased to 108 (wcpm) with an increase of 72 words per minute. Research shows that Readers' Theater is a way for students to find a greater meaning of text while making substantial improvements in expressive reading (Rasinski, 2012).

On the contrary, Kariuki and Rhymer's study (2012) assessed the effects of Readers' Theatre and traditional instruction on reading comprehension for 20, 6th graders, 10 male and 10 female, in a Title I middle school. They were randomly assigned to both

the experimental and control groups. The participants were assessed using two teacher-created tests with multiple choices focusing on material covered in science, specifically electricity. Both of these assessments were aligned with the 6th grade science curriculum standards.

During the first 5 days, the control group was taught science content about electricity using conventional methods, including PowerPoint slides, note-taking, making cut-and-paste diagrams, and hands-on experiments. On the 6th day, the students were assessed on the material covered in the previous week. As for the 7th through 12th days, the experimental group focused on Readers' Theatre. This group worked together to write and produce a Readers' Theatre script on electricity. The teacher played a role as the facilitator to support student interactions, guiding research, and modeling the proper expression and gestures used in Readers' Theatre. Both groups were given a test at the end of the Readers' Theatre instruction.

The results showed Readers' Theatre can be more effective than conventional teaching methods in regard to comprehension, which in turn is dependent upon ORF. When Readers' Theatre was implemented, both male and female students benefited equally. Furthermore, this type of instruction can be useful in teaching the content areas, such as science, because it focuses on rehearsing the text and building ORF, which significantly improves comprehension.

Words Their Way. This program is based on learning word patterns rather than memorizing unconnected words as an alternative to traditional spelling instruction. *Word Study* is a cohesive approach to word recognition, vocabulary, and phonics as well as spelling. The primary goal is to support students' development of orthography knowledge

so that students can apply as they are reading and writing (Williams, Phillips-Birdsong, Hufnagel, & Hungler, 2015). Miles' study (2014) evaluated the impact of *Words Their Way: Word Study in Action*, a phonics, spelling, and vocabulary program with English Language Learners (ELL) at 2nd and 3rd grade. Two urban schools comprised of a large Hispanic population were the focus. Seventy (35 students from each grade) students participated in the treatment group and 66 (40 second graders and 26 third graders) students comprised the control group based on their specific grade level and language proficiency. The participants from one school were selected as the treatment group, another school was the control. The treatment group participated in the *Words Their Way: Word Study in Action* program as an intervention, while the control participated in various phonics, spelling, and vocabulary programs selected by the school.

Both schools integrated *Words Their Way* into their core curriculum of literacy instruction. Each day, students received a block of balanced literacy instruction for 120 minutes. Of these, 20-30 minutes were already devoted to word work from *Words Their Way (4th Edition, 2007/2008)* five days per week. In addition, the students in the treatment group were pulled out in a small group for 30 minutes to work on supplemental materials, for example, working with the interactive whiteboard for whole group sort, independent practice with a student using a workbook with colored photographs, and rhyming activities.

The treatment group was evaluated using 3 measures, a qualitative spelling inventory pretest (whole group) and posttest (small group) from the *Words Their Way* program, as well as a mid-year and end-of-year benchmark assessment from DIBELS Next. Furthermore, this group was also administered the Elementary Reading Attitude

Survey (ERAS). The Elementary Spelling Inventory used a list of 25 words containing different spelling features and patterns increasing in difficulty. The list began with the word “bed” and concluded with “opposition”. The second assessment, ERAS was used to determine diverse levels of students’ attitudes towards reading. This survey was read aloud and comes in a picture format, using the cartoon character Garfield. The students were asked particular questions about both academic and recreational reading, and chose from one of four Garfield illustrations to describe their mood during that time. The pictures ranged from very positive to very negative facial expressions. The final assessment, DIBELS Next, focused on identifying early literacy skills (fluency, naming letters, phonemic awareness, text reading comprehension).

The results revealed that there was not a significant difference in reading achievement for the students in the treatment group on composite growth or fluency. The mean composite growth score for the treatment group at one school was 45.4, and the control group at the other school was 42.1. As for reading fluency, the mean score for the treatment group at one school was 76.0 and the control at the other school was 78.8. A significant difference was not evident between the two groups on mean scores of fluency and composite growth from the middle of the year to the end of the year. The fluency scores showed the mean number of words read per minute (wpm) increased from 67 wpm to 78 wpm and the composite growth increased from 196 to 241. However, on the *Words Their Way* Spelling Inventory, 69% showed growth on one to three features. This shows that many students were making progress along the orthographic continuum, but not enough to show a significant difference in reading achievement. As for the ERAS, the mean percentile rank was 51.9% prior to participation and at the conclusion of 6 weeks

increased to 53.2% for reading attitudes. Even though there are some increases, the sample size is not large enough nor is it enough time to identify significant improvement.

Dearnley, Freeman, Gulick, and Neri (2002) evaluated an empirical report to summarize their findings, which focused on improving the reading and writing of second graders using *Words Their Way* in conjunction with a balanced literacy program. The report concentrated on approximately 42, 2nd graders; 9 of which were receiving special education. Each student participated in the school's two-hour, uninterrupted literacy program daily. During this time, an extension teacher worked with the classroom teacher for an hour, allowing for smaller guided reading groups and word study groups. In addition to these activities, a developmental spelling analysis is implemented. This assessment calculates the students' knowledge of word features, and based on the results students are grouped according to their ability. The students fall into one of the five spelling stages: preliterate, letter name, within-word pattern, syllable juncture, and derivational constancy.

The *Words Their Way* implementation takes a week and began with the students receiving their words to cut out. The teacher introduced the words and modeled word sorting in a small group, and the students gave input as to why the words should be sorted. Students took their words back to their seats to independently sort and copy the sort in their notebooks. On the following day, students re-sorted and picked 6 words to draw and label. The third day consisted of students working with a partner to sort their words and discuss any difficulties. The day before the test the students may have a speed sort with the teacher or a word hunt activity to prepare them. On test day, the teacher planned a review game or activity using the weekly words prior to the test administration.

When it was evident that the student did not grasp the weekly concept, it was focused on again the following week with new words. This may be repeated until the student showed ownership of the concept. However, if progression halted then the groups may be changed.

In conclusion, prior to the *Words Their Way* program implementation, 49% of the students were below grade level, 44% on grade level, and only 7% were above grade level. After one year of implementation, 26% of students were increased on grade level. This was further evident on the state test, Phonological Awareness Literacy Screening (PALS) administered twice a year. Therefore, *Words Their Way* is considered as an effective program. Even though the outcome is positive, 30% of students still failed the PALS without meeting the grade level expectancy.

Although, the *Words Their Way* program has been utilized since 2008, a limited amount of research has been conducted to evaluate its effects, but a great deal of descriptive information presented. This is why one research article is displayed and the other is an empirical report. Further studies on *Words Their Way* may need to validate the finding. This present study plans to evaluate the effectiveness of the *Word Study* approach, using *Words Their Way* and the Wilson Reading System for overall reading achievement focusing on the ORF and reading comprehension of 8, 3rd and 4th graders with SLD.

In summary, reading has been a challenge for many students at risk, and various intervention programs have been implemented. For instance, the Orton-Gillingham approach to reading is a language-based, multisensory approach focusing on the basics of word formation. Hence, building basic reading skills is essential for higher level learning,

such as decoding, ORF, and reading comprehension. Another approach to reading is Reader's Theater, which is designed to allow students to read and re-read a selected passage until reaching a satisfactory level of ORF. Lastly, the *Word Study* approach emphasizes spelling patterns to build word knowledge, within which, *Words Their Way* is a component. Each approach has demonstrated student progress and has been suggested to apply in the field. This present study attempts to use *Word Study* with *Words Their Way* as a supplement to improve overall reading performance of students with SLD.

Chapter 3

Method

Setting

The study was conducted at an educational complex along the New Jersey shoreline comprised of both an elementary and middle school. The elementary school consists of grades from pre-school through fourth with a total of 438 students, and the middle school covers fifth through eighth grades with a total of 328 students. The student population is comprised of 35% Caucasian, 41% Hispanic, 15% Asian, and 5% African American. Various programs are offered to students based on their needs, such as in-class resource program, support services in-class, a pull-out program, and general education. The placement decisions of students with disabilities are made by the child study team based on the individual needs.

Classroom

The study took place in the 3rd and 4th grade's inclusive classrooms during language arts, with a total of 17 students receiving special education services in the two classrooms. Of those, five were in 3rd grade and three were in 4th grade. Two teachers were involved, one general education and the other special education, to provide instruction in the classroom. Only the special education teacher provided the instruction for this study.

Participants

Students

Five, 3rd and 4th grade students participated in the study. These students are classified with specific learning disabilities (SLD) by the child study team (CST)

according to the state administration code. Each student had an Individual Education Program (IEP) with goals and objectives in language arts, especially in reading and writing. Table 1 presents the general information about participants.

Table 1

General Information of Participating Students

Student	Age	Gender	Grade	*Ethnicity	**Fountas/Pinnell (F/P) Level
1	8	M	3	C	I
2	8	M	3	H	H
3	9	M	4	C	N
4	9	M	4	AA	J
5	9	M	4	H	L

*H=Hispanic, C=Caucasian, and AA=African American.

**F/P Level- F=middle of 1st grade (approaches expectations), I=middle of 1st grade (exceeds expectations)/end of 1st grade (approaches expectations), H=middle of 1st grade (meets expectations), N=middle of 3rd grade (meets expectations), J=beginning of 2nd grade (meets expectations), L=middle of 2nd grade (meets expectations).

Student 1 read on I reading level, which is comparable to the middle of 1st grade (February-March). His strengths were identifying the main idea, understanding cause and effect, and sequencing parts of a story. Student 1 used context clues to locate information in the story and was able to answer the literal questions of a story. However, he struggled with decoding and identifying long vowel sounds. Student 1 had trouble with inferential questions and summarizing a story. He demonstrated difficulty with fact and opinion.

Student 2 read on H reading level, which correlates with the middle of 1st grade (February-March). He was able to make connections with the text. He used context clues to locate information in a story. Student 2 was able to sequence and identify narrative

elements. For instance, he was able to identify the story setting. However, his difficulties were with decoding and recognizing long vowel sounds. Student 2 struggled with identifying the main idea and making inferences. He exhibited difficulty differentiating between fact and opinion.

Student 3 read on N reading level, which correlates with the middle of 3rd grade (November-December). He was in the syllables and affixes spelling stage for *Words Their Way*. His strengths were centered on fluency and accuracy while reading, as well as his ability to decode multisyllabic words. Student 3 had the capability to retell the main events in fictional stories. However, his difficulties were with basic reading skills and reading comprehension. Student 3 struggled with applying the rules he learned for spelling and responding to text in writing. Even though he was able to retell a story, Student 3 had a difficult time inferring and understanding the theme of the story.

Student 4 read on J reading level, which correlates with the beginning of 2nd grade (August-September). He was in the beginning within word stage for *Words Their Way*. His strengths were that he was able to retell and infer information from books on his instructional level, and retell details from nonfiction. Many times Student 4 memorized weekly word patterns and applied them to new material. Conversely, he displayed difficulties with basic reading skills, written expression, and reading fluency. Student 4 struggled with reading fluency and accuracy, as well as decoding multisyllabic words. When it comes to reading comprehension, he had difficulty identifying the main idea and retelling the main events of a fictional story.

Student 5 read on L reading level, which corresponds with the middle of 2nd grade (February-March). He was in the middle of the within word stage for *Words Their Way*.

His strengths were with reading fluency and memorizing weekly word patterns to apply them to new words. Student 5 was able to locate key words and details from nonfiction text, as well as retell the main events in a fictional story. Yet, he had difficulty with oral expression. His weaknesses were evident with inferring the main idea and summarizing nonfiction, as well as sequencing events.

Teachers

In the 3rd grade class, the special education teacher had 18 years of experience in teaching students with SLD and the 4th grade special education teacher had 13 years of experience with SLD. Both teachers delivered the lessons for the study.

Research Design

Multiple baselines across grade levels with AB phases was used in the study. During Phase A, the baseline, the participating students were given four assessments including Words Their Way (WTW), Spelling Inventory, Comprehension Rubric, and ORF over one month. These scores were recorded as baseline data. During Phase B, the intervention, students were taught *Words Their Way* strategies through word study instruction, the 3rd grade group started one week ahead of the 4th graders, and each group received 8 weeks of instruction.

Materials

Instructional Materials

Word cards. These cards were used for the students to sort words from their *Words Their Way* spelling stage lists, consisting of 10-12 words, one word per card. Each

week, students are given updated spelling stage lists, depending upon their word learning in the previous week.

Anchor charts. These charts were used to display the words from *Words Their Way* spelling stages. For instance, short and long /a/ words were separated into different categories. They are offered for the students to visualize the connections and differences between words in their pattern.

Non-fiction passages. These were adopted from www.readinga-z.com with a total of 8 passages for students as a reading assignment, one passage a week. These passages were selected by the reading specialist based on the students' F/P guided reading levels.

Fictional books. These reading books were selected based on the *Words Their Way* spelling rule. They were provided by the reading specialist and used to identify words in their spelling stages for the Word Hunt. For example, Hats That Tap! by Hogan (2007) and Pam Cat by Gold (2007) were the major selected reading books.

Measurement Materials

Worksheet. After each lesson, the student is instructed to use reading books on their instructional F/P guided reading level to identify 10 words from their spelling stage for the week. As the student identified the words, he/she were required to write down on the worksheet which consisted of 10 lines, one word per line, and each word was worth 1 point.

Spelling inventory. It serves as a sheet with lines and students numbered it from one to 10 or one to 12, depending on the weekly words. Students were required to write down each word at the line following the number order during the dictation.

Comprehension question rubric. The rubric consists of three columns: key elements, prompts, and scores. The key elements include topic, main idea/details, organization, command of vocabulary, and accuracy. The prompts are questions relating to each of the key elements. For instance, “What is the passage about?” and “What are the main ideas of the passage?” The scores are identified in the scoring guide as “complete” with scores of 3, “partial” for 2, “fragmentary” for 1, and “inaccurate” for 0. The total points 15-21 for “skilled”, 8-14 for developing, and needs work (0-7) were recorded to measure the level of student understanding of their reading passage.

Procedure

Instructional Procedures

The students were taught based on their word patterns for the week following a lesson plan (See Appendix A). Each lesson started with a discussion on features and patterns of the words, then students were grouped to complete activities including word sorting, word hunting, and a passage reading.

Word sorting. Students were directed by the teacher to organize word cards and use tile boards to spell out each word by sorting into the correct category. This was based on their individual spelling rule and word pattern for the week. The students were assessed using a Spelling Inventory. The inventory consisted of the teacher saying the

word, using it in a sentence, and saying the word again. In order to move to the next list, the student must attain a score of 80 or better.

Word hunting. In the activity, students were instructed to hunt through decodable reading books for approximately 5 minutes to find examples of the spelling rule that they are studying. For example, short and long /a/ words were the focal point in week one. Each week the word lists were changed based on the students' performance. The students completed a worksheet, consisting of 10 lines, populating each with one word that they found.

Passage reading. A passage selected from www.readinga-z.com was corresponding to student F/P guided reading levels. Each student was timed for one-minute to read the passage aloud, followed by responding to 5 questions using the comprehension rubric. Table 2 presents the instructional procedures.

Table 2

Instructional Procedures

Weeks	Procedures
1.	<p>Day 1: Each lesson began with students discussing and reciting the word list. Students were directed by the teacher to organize word cards and use tile boards to spell out each word by sorting into the correct category for the week. They were instructed to hunt through decodable reading books for approximately 5 minutes to find examples of the spelling rule.</p> <p>Day 2: Students completed a Spelling Inventory to check the understanding of their patterns. A passage based on F/P guided reading levels was timed for one-minute while the student read aloud. They were assessed using the comprehension question rubric that consists of the 5 questions.</p>
2.	<p>Day 1: Each lesson began with students discussing and reciting the word list. Students were directed by the teacher to organize word cards and use tile boards to spell out each word by sorting into the correct category for the week. They were instructed to hunt through decodable reading books for approximately 5 minutes to find examples of the spelling rule.</p> <p>Day 2: Students completed a Spelling Inventory to check the understanding of their patterns. A passage based on F/P guided reading levels was timed for one-minute while the student read aloud. They were assessed using the comprehension question rubric that consists of the 5 questions.</p>
3.	<p>Day 1: Each lesson began with students discussing and reciting the word list. Students were directed by the teacher to organize word cards and use tile boards to spell out each word by sorting into the correct category for the week. They were instructed to hunt through decodable reading books for approximately 5 minutes to find examples of the spelling rule.</p> <p>Day 2: Students completed a Spelling Inventory to check the understanding of their patterns. A passage based on F/P guided reading levels was timed for one-minute while the student read aloud. They were assessed using the comprehension question rubric that consists of the 5 questions.</p>
4.	<p>Day 1: Each lesson began with students discussing and reciting the word list. Students were directed by the teacher to organize word cards and use tile boards to spell out each word by sorting into the correct category for the week. They were instructed to hunt through decodable reading books for approximately 5 minutes to find examples of the spelling rule.</p> <p>Day 2: Students completed a Spelling Inventory to check the understanding of their patterns. A passage based on F/P guided reading levels was timed for one-minute while the student read aloud. They were assessed using the comprehension question rubric that consists of the 5 questions.</p>
5.	<p>Day 1: Each lesson began with students discussing and reciting the word list. Students were directed by the teacher to organize word cards and use tile boards to spell out each word by sorting into the correct category for the week. They were instructed to hunt through decodable reading books for approximately 5 minutes to find examples of the spelling rule.</p> <p>Day 2: Students completed a Spelling Inventory to check the understanding of their patterns. A passage based on F/P guided reading levels was timed for one-minute while the student read aloud. They were assessed using the comprehension question rubric that consists of the 5 questions.</p>
6.	<p>Day 1: Each lesson began with students discussing and reciting the word list. Students were directed by the teacher to organize word cards and use tile boards to spell out each word by sorting into the correct category for the week. They were instructed to hunt through decodable reading books for approximately 5 minutes to find examples of the spelling rule.</p> <p>Day 2: Students completed a Spelling Inventory to check the understanding of their patterns. A passage based on F/P guided reading levels was timed for one-minute while the student read aloud. They were assessed using the comprehension question rubric that consists of the 5 questions.</p>
7.	<p>Day 1: Each lesson began with students discussing and reciting the word list. Students were directed by the teacher to organize word cards and use tile boards to spell out each word by sorting into the correct category for the week. They were instructed to hunt through decodable reading books for approximately 5 minutes to find examples of the spelling rule.</p> <p>Day 2: Students completed a Spelling Inventory to check the understanding of their patterns. A passage based on F/P guided reading levels was timed for one-minute while the student read aloud. They were assessed using the comprehension question rubric that consists of the 5 questions.</p>
8.	<p>Day 1: Each lesson began with students discussing and reciting the word list. Students were directed by the teacher to organize word cards and use tile boards to spell out each word by sorting into the correct category for the week. They were instructed to hunt through decodable reading books for approximately 5 minutes to find examples of the spelling rule.</p> <p>Day 2: Students completed a Spelling Inventory to check the understanding of their patterns. A passage based on F/P guided reading levels was timed for one-minute while the student read aloud. They were assessed using the comprehension question rubric that consists of the 5 questions.</p>

Note: The procedures of 3rd are similar to 4th, but the reading passages are different.

Data Analysis

Means (M) and standard deviations (SD) of student performance scores in each assessment including F/P Level, Grade Level DIBELS, Words Their Way Spelling Inventory, Comprehension Rubric Assessment, and ORF Instructional Guided Reading Level were presented in a table. A visual graph was developed to demonstrate each student's performance in each phase to compare the difference between the baseline and interventions.

Chapter 4

Results

Student performance was evaluated by Words Their Way (WTW), Spelling Inventory, Comprehension Rubric, and ORF Instructional Guided Reading Level over a one month period. Table 3 presents means (M) and standard deviations (SD) of their scores before *Words Their Way*, as the baseline for 4 weeks and during *Words Their Way* instruction as the intervention for 8 weeks.

Table 3

Student Performance Scores

Student	Phase	WTW		* ORF		** Comp. Rubric	
		M	SD	M	SD	M	SD
Student 1	Baseline	46.5	10.6	42.5	17.7	6.0	1.4
	Intervention	86.3	7.4	66.9	14.1	10.1	2.1
Student 2	Baseline	51.9	9.5	41.5	12.0	5.0	7.1
	Intervention	92.5	11.6	65.5	15.0	8.4	1.6
Student 3	Baseline	65.3	10.1	122.3	25.1	10.0	2.0
	Intervention	89.5	5.0	100.0	16.6	13.0	2.9
Student 4	Baseline	41.0	4.6	80.3	11.7	4.7	2.1
	Intervention	91.5	7.5	89.0	4.6	7.5	1.9
Student 5	Baseline	68.0	4.4	105.0	11.4	7.0	1.0
	Intervention	82.8	11.8	83.9	19.7	8.6	1.6

*ORF- Oral reading fluency: correct words read per minute (WCPM).

**Comprehension Rubric: 15-21= Skilled, 8-14= Developing, and 0-7= Needs Work.

Table 3 presents student scores of each assessment across phases. Both *Words Their Way* (*WTW*) and the ORF Instructional Guided Reading Level (ORF) were used as measurements for oral reading fluency, as well as the comprehension rubric to measure reading comprehension. Student 1 had a mean score of 46.5 for *WTW* in the baseline. In comparison, his mean score increased to 86.3 in the intervention. For ORF, Student 1 had

a mean score of 42.5 WCPM as the baseline, and increased to 66.9 WCPM in the intervention. His mean score for the comprehension rubric was 6.0 in the baseline. Over a period of 8 weeks, Student 1 reached the developing stage which is depicted by a score of 10.1 for reading comprehension. Student 2 had a mean score of 51.9 as the baseline for *WTW*, and increased to 92.5, which was the highest of the five participants. In ORF, Student 2 demonstrated a mean score of 41.5 of WCPM as the baseline, and increased to 65.5 in the intervention. His mean score on the comprehension rubric was 5.0, and increased to 8.4, which revealed that he is in the developing stage, even with 3.4 increased scores. Student 3 had a mean score of 65.3 for *WTW* in the baseline, and increased to 89.5 for the intervention. For ORF, he had 122.3 for WCPM, but decreased to 100.0 in the intervention. His comprehension mean score was 10.0 in the baseline, increased to 13.0 in the intervention, demonstrating that he is in the developing stage. Student 4 had a mean score of 41.0 for *WTW* in the baseline, and increased to 91.5 during the intervention. His mean score of ORF was 80.3 in the baseline, and increased to 89.0 in the intervention. Student 4 had a comprehension mean score of 4.7, which was the lowest of the five participants. His scores were increased to 7.5, revealing that he is between the stage of needing work and developing in his reading comprehension. Student 5 had a mean score of 68.0 for *WTW* in the baseline, which was the highest of the five participants. His score was increased to 82.8 in the intervention. For ORF, Student 5 had mean score of 105.0 in the baseline, and increased to 83.9. His comprehension mean score was 7.0, and increased to 8.6, which revealed that he is in the developing stage for reading comprehension.

Figures 1, 2, and 3- present student performance in each area, i.e. WTW, ORF and Reading Comprehension across phases.

Oral Reading Fluency

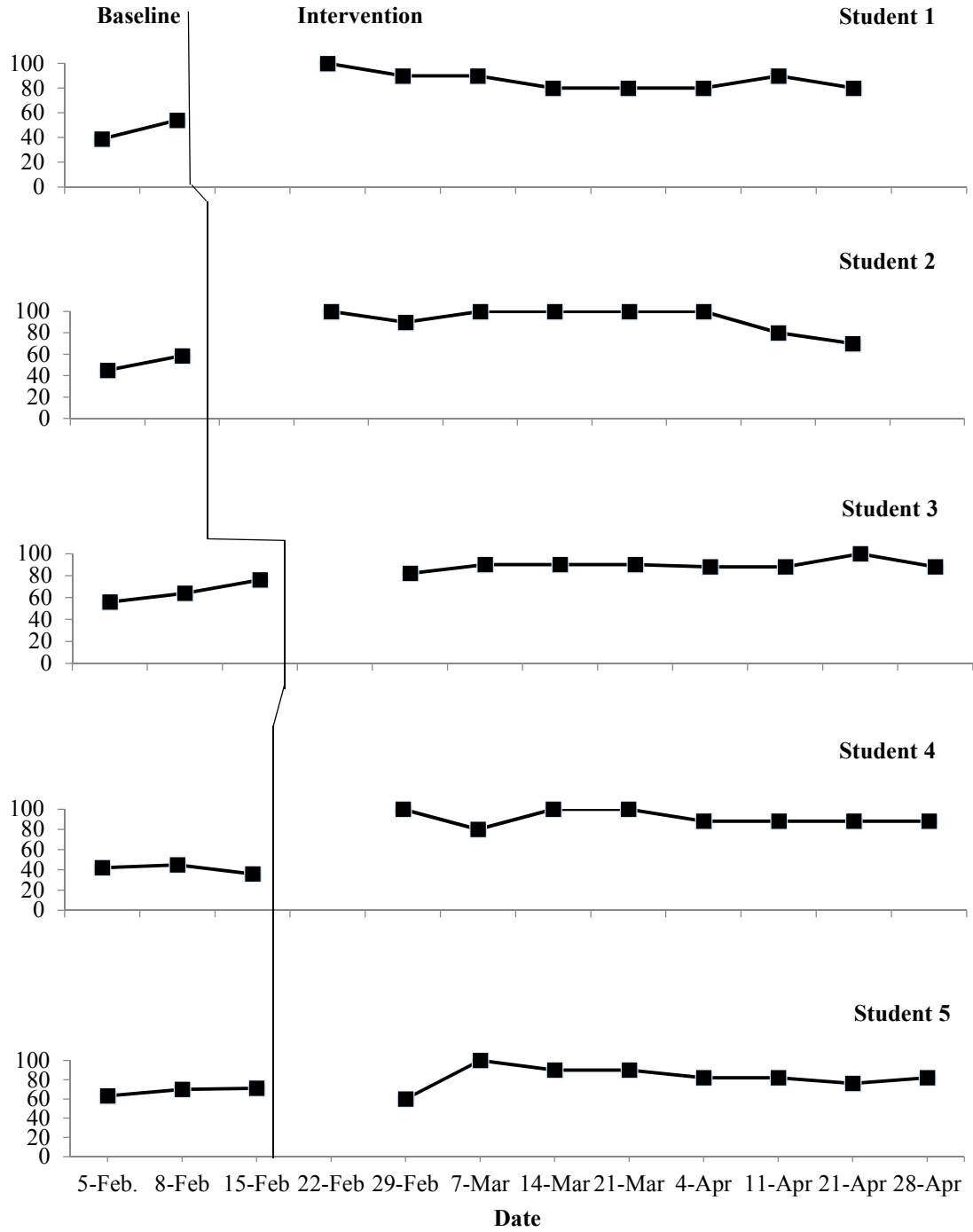


Figure 1. Student performance on Words Their Way (WTW)

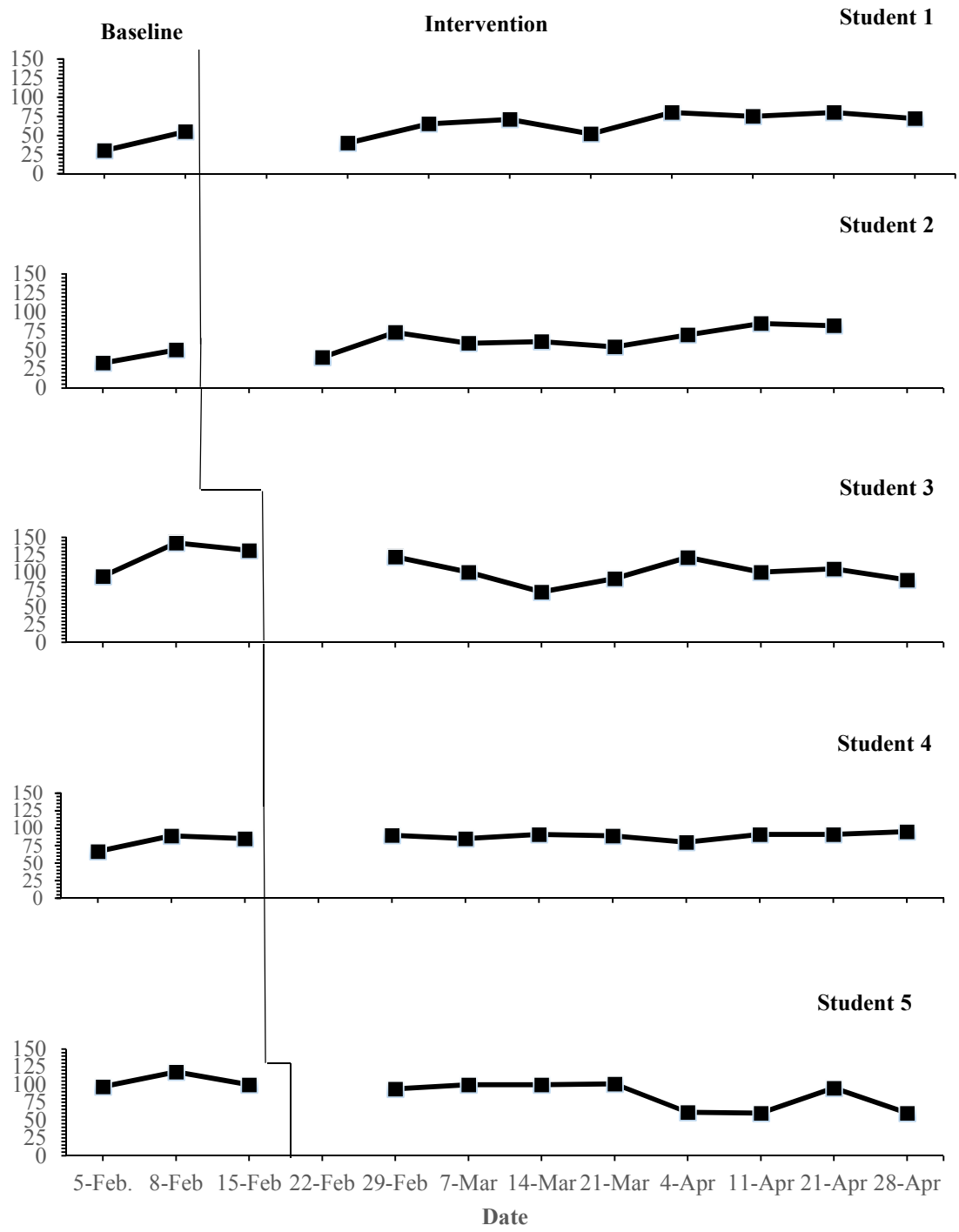


Figure 2. Student performance on Oral Reading Fluency (ORF)

Reading Comprehension

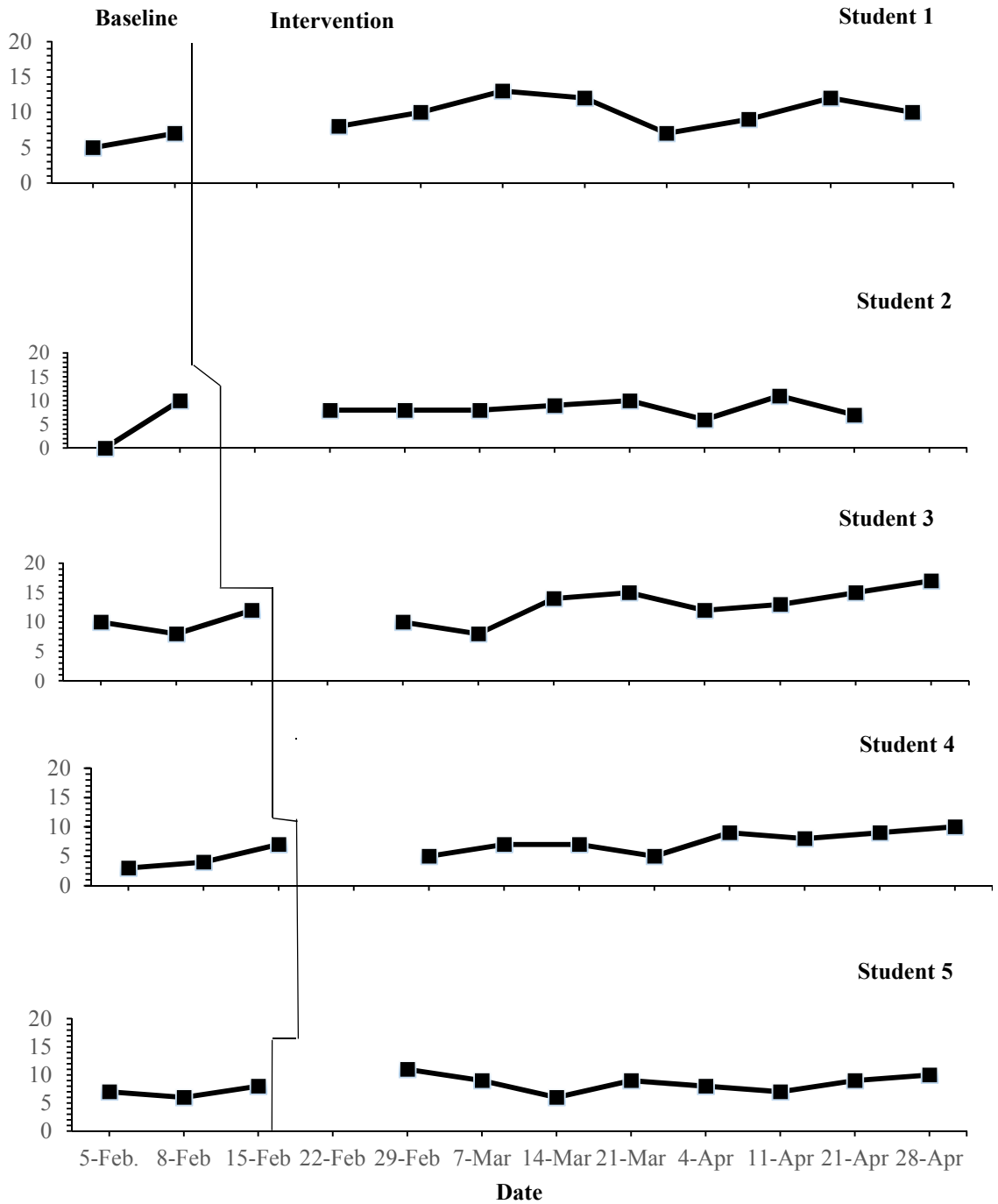


Figure 3. Student performance on Comprehension Scores

The above figures give a visual representation of each student's performance in each skill area.

Chapter 5

Discussion

This study examined the effects of the *Words Their Way* reading program on teaching decoding skills, oral reading fluency, and reading comprehension for 3rd and 4th grade students with learning disabilities. It attempted to investigate how *Word Study* techniques, which encompass both *Words Their Way* and the Wilson Reading System, improve students' overall reading performance. All the students showed increased scores in their spelling inventory and comprehension when the program of *Words Their Way* was provided. As for the passage reading, 3 out of 5 students progressed. It appears that the implementation of *Word Study* techniques has positive results, and may benefit elementary students with learning disabilities.

The first research question focused on whether students with SLD improved their reading fluency by increasing their WCPM when the *Word Study* program was provided. Students were taught to read non-fiction passages on their Fountas/Pinnell reading level for one-minute each week to evaluate their ORF. Results revealed that 3 out of the 5 participants increased their WCPM, while the other two did not. This may mean that the program was not effective for all participants on improving reading fluency. There are two factors that should be considered, one is their interest in the topic, and another is the level of difficulty. To date, limited research has been found to evaluate *Words Their Way* in the area of reading fluency and comprehension, especially for students with SLD. Bisplinghoff (2015) examined the effectiveness of OG programs in reading achievement focusing on first-graders at-risk for learning disabilities, and, Trepanier's study (2009) examined 1st and 2nd graders in general education. Limited studies were focused on those

with learning disabilities, while most students referred to receive special education had reading problems. Whereas, this study included 3rd and 4th graders with SLD as samples. On the other hand, Miles (2014) and Dearnley, Freeman, Gulick, and Neri's studies (2002) evaluated the impact of *Words Their Way*, for example, Miles (2014) examined the impact of *Words Their Way: Word Study in Action* with English Language Learners (ELL) at the 2nd and 3rd grades in two urban schools with a large Hispanic population. While Dearnley, et. al (2002) presented an empirical report, focusing on the improvement of reading and writing using *Words Their Way* in combination with a balanced literacy program for 42, 2nd graders, 9 of which received special education. Lastly, Hymes (2013) evaluated the effect of Readers' Theater on the oral reading fluency of 6, 2nd graders, 4 females and 2 males with varying reading abilities. Despite different participating samples, this present study focused on students with learning disabilities demonstrating their gained scores in ORF which are consistent with the previous studies. Further studies may be considered to include various students in different levels, as well as additional time to validate the finding.

The second research question asked whether students with SLD improved their reading comprehension skills by increasing weekly scores when the *Word Study* program was provided. Students were taught to read non-fiction passages on their Fountas/Pinnell reading level and answered 5 questions to assess their comprehension. Results revealed that all of the participants increased their reading comprehension skills when the *Word Study* program was implemented in reading instruction. It seems that the program was effective for each participant on improving their reading comprehension. The finding is consistent with the studies on Readers' Theater. For example, Hymes' study (2013)

evaluated Readers' Theater to improve ORF that is a precursor to reading comprehension. Kariuki and Rhymers' study (2012) compared the effects of Readers' Theatre to traditional instruction on reading comprehension. Both *Words Their Way* and Reader's Theater had a positive impact on student's reading comprehension skills.

Limitations

Despite positive results of this study, some limitations were found. One was the small number of 5 participants and another was the length of the instructional time. Students in the study were being taught by a teacher, but some other school activities were scheduled during the instructional time, such as meetings, testing, and other school duties. Perhaps, it would benefit students more if the reading instruction could last over a longer period of time.

Implications

Developing English language is a continuous process for students, and needs practices on a daily basis. It would be beneficial if *Words Their Way* was carried through from elementary to the middle school. This way, students could continue to progress through each of the five stages, i.e. emergent skills, letter name-alphabetic spelling, within word pattern, syllables and affixes, and derivational relations. The program of *Words Their Way* encompasses reading, writing, and spelling to provide a multi-sensory approach, which is advantageous to various students at different levels. With the proper fidelity and implementation, the *Word Study* approach may increase students' knowledge of vocabulary words and reading comprehension skills. Recently, this program has been implemented in some schools, it is my recommendation for teachers to adopt the reading

materials and incorporate this program in their reading instruction, especially for those students at risk or with learning disabilities.

Conclusions and Recommendations

Results of this study supported the use of *Word Study* techniques, which incorporate *Words Their Way* and the WRS. Future research should be conducted over a longer period of time with a larger, more diverse sample size in order to validate the findings. It is suggested to begin the program and instruction when school starts and carry it through 6 months to allow students to practice and to enhance teachers' experience in adapting the reading materials to meet their students' needs. More time should be recommended for students to practice per week to expand their knowledge and discuss any questions with their teacher and peers. Proper fidelity plays a huge role in the implementation of the *Word Study* approach in reading instruction. Therefore, providing a more systematic, explicit program would be beneficial for each student involved, especially for those with learning disabilities.

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Appendix A

Lesson Plan

Day: 1

- Students will discuss and recite discussing the weekly word list.
- Students will organize word cards and use tile boards to spell out each word by sorting into the correct category.
- Students will hunt through decodable reading books for approximately 5 minutes to find examples of the spelling rule.

Day 2:

- Students will complete a Spelling Inventory to check the understanding of their patterns.
- Students will read aloud a passage based on F/P guided reading levels for one-minute.
- Students will be assessed using the comprehension question rubric that consists of the 5 questions.

Appendix B

Comprehension Rubric

Student's Name _____ Date _____

Scoring Individual Story Elements:

Complete= 3 points, partial= 2 points, fragmentary= 1 point, and inaccurate= 0 points.

Key Elements	Prompts	0	1	2	3
Topic	What is the book about?				
Main Idea	What are the main ideas of the passage?				
Details	Give details of each main idea.				
Vocabulary	What are some key terms?				
Accuracy	Were the student's facts accurate?				

Point totals: Skilled=15-21, Developing= 8-14, and Needs work= 0-7.

Appendix C

Spelling Word List

Name _____ Date _____

Rule _____ List of Words Week # _____

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Appendix D

Word Hunt

Name _____ Date _____

Rule _____ Week# _____

Please search for 10 words that follow your spelling rule in your books.
Once you have found them write them on the lines below.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____